

Remedial Action Report

Willow Brook and Willow Brook Pond
United Technologies Corporation
Pratt & Whitney
East Hartford, CT

November 2002
Volume 3 of 5
Appendices A to C

RCRA RECORDS CENTER
FACILITY Pratt & Whitney Main St
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An Employee Owned Company

Comm. No. 88UT002

Appendix A

Table of Performance Evaluation Sample Certified Values and Analytical Results



RESULTS OF PERFORMANCE SAMPLE EVALUATION
WILLOW BROOK AND WILLOW BROOK POND



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Loureiro Engineering Associates, Inc.

Location Identifier: WT-AC-02-00

Sample Identifier 2001316 11/14/2001 18:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111660-25				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111660-25				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111660-25				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111660-25				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111660-25				
PCB-1254 (Arochlor 1254)	3.8		0.40	0.120	ug/l	1	PREM	E111660-25	3.90	4.60	2.35	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111660-25				

Location Identifier: WT-AC-02-003

Sample Identifier 2001315 11/14/2001 18:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111656-6				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111656-6				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111656-6				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111656-6				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111656-6				
PCB-1254 (Arochlor 1254)	4.6		0.40	0.120	ug/l	1	PREM	E111656-6	4.78	5.56	2.91	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111656-6				

Location Identifier: WT-AC-03-001

Sample Identifier 2001270 11/06/2001 14:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111220-36				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111220-36				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111220-36				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111220-36				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111220-36				
PCB-1254 (Arochlor 1254)	2.4		0.40	0.120	ug/l	1	PREM	E111220-36	2.86	3.59	1.71	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111220-36				

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Location Identifier: WT-AC-03-002

Sample Identifier 2001301 11/09/2001 16:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111435-26				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111435-26				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111435-26				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111435-26				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111435-26				
PCB-1254 (Arochlor 1254)	2.4		0.40	0.120	ug/l	1	PREM	E111435-26	4.78	5.56	2.91	FAIL
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111435-26				

Location Identifier: WT-AC-03-005

Sample Identifier 2001331 11/27/2001 14:02 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A64-10				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A64-10				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A64-10				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A64-10				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A64-10				
PCB-1254 (Arochlor 1254)	6.2		0.40	0.120	ug/l	1	PREM	E111A64-10	7.17	8.34	4.36	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A64-10				

Location Identifier: WT-AC-03-006

Sample Identifier 2001332 11/27/2001 14:05 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	39		5.0	0.184	ug/l	1	PREM	E111A64-11	39.6	47.8	30.1	Pass
1,1,2,2-Tetrachloroethane	150		5.0	0.243	ug/l	1	PREM	E111A64-11	133	168	96.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E111A64-11				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E111A64-11				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E111A64-11				
1,2-Dichloroethane	73		5.0	0.288	ug/l	1	PREM	E111A64-11	73.8	90.0	58.7	Pass
1,2-Dichloropropane	65		5.0	0.234	ug/l	1	PREM	E111A64-11	64.5	75.5	50.3	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E111A64-11				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E111A64-11				
Benzene	32		5.0	0.184	ug/l	1	PREM	E111A64-11	30.1	36.1	24.4	Pass

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Bromodichloromethane	56		5.0	0.172	ug/l	1	PREM	E111A64-11	55.3	66.5	44.7	Pass
Bromoform	72		5.0	0.127	ug/l	1	PREM	E111A64-11	66.4	82.9	51.5	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E111A64-11				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E111A64-11				
Carbon Tetrachloride	35		5.0	0.228	ug/l	1	PREM	E111A64-11	33.9	43.4	25.5	Pass
Chlorobenzene	14		5.0	0.157	ug/l	1	PREM	E111A64-11	14.4	16.9	12.0	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E111A64-11				
Chloroform	14		5.0	0.226	ug/l	1	PREM	E111A64-11	13.8	16.6	11.2	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E111A64-11				
Dibromochloromethane	46		5.0	0.156	ug/l	1	PREM	E111A64-11	43.5	52.9	33.6	Pass
Ethylbenzene	28		5.0	0.176	ug/l	1	PREM	E111A64-11	27.1	32.4	21.1	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E111A64-11				
Methyl Isobutyl ketone (4-Methyl-2-Penta	61		10	1.89	ug/l	1	PREM	E111A64-11	59.8	75.9	35.1	Pass
Methylene Chloride	25		5.0	0.789	ug/l	1	PREM	E111A64-11	27.8	35.2	21.1	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E111A64-11				
Tetrachloroethylene (PCE)	46		5.0	0.171	ug/l	1	PREM	E111A64-11	50.3	59.3	38.5	Pass
Toluene	40		5.0	0.188	ug/l	1	PREM	E111A64-11	40.2	46.7	32.4	Pass
Trichloroethylene (TCE)	23		5.0	0.220	ug/l	1	PREM	E111A64-11	24.8	29.5	18.9	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E111A64-11				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E111A64-11				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E111A64-11				
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E111A64-11				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E111A64-11				

Location Identifier: WT-AC-03-007

Sample Identifier 2001333 11/27/2001 14:08 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	10		0.40	0.150	mg/L	1	PREM	E111A64-12	6.93	8.66	4.16	FAIL

Location Identifier: WT-AC-03-008

Sample Identifier 2001334 11/27/2001 14:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	100		5.0	0.330	ug/l	1	PREM	E111A64-13	150	155	66.2	Pass
1,2-Dichlorobenzene	15		5.0	0.400	ug/l	1	PREM	E111A64-13	27.2	30.4	6.64	Pass
1,3-Dichlorobenzene	33		5.0	0.310	ug/l	1	PREM	E111A64-13	58.9	64.8	15.1	Pass
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E111A64-13				
2,4,5-Trichlorophenol	92		5.0	0.550	ug/l	1	PREM	E111A64-13	112	126	59.2	Pass

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2,4,6-Trichlorophenol	110		5.0	0.420	ug/l	1	PREM	E111A64-13	146	169	71.7	Pass
2,4-Dichlorophenol	140		5.0	0.380	ug/l	1	PREM	E111A64-13	189	199	94.3	Pass
2,4-Dimethylphenol	80		5.0	0.640	ug/l	1	PREM	E111A64-13	123	139	49.0	Pass
2,4-Dinitrophenol	120		5.0	0.0700	ug/l	1	PREM	E111A64-13	184	191	30.1	Pass
2,4-Dinitrotoluene	40		5.0	0.600	ug/l	1	PREM	E111A64-13	55.4	64.2	28.9	Pass
2,6-Dinitrotoluene	130		5.0	0.530	ug/l	1	PREM	E111A64-13	165	193	89.1	Pass
2-Chloronaphthalene	ND<5.0	U	5.0	0.510	ug/l	1	PREM	E111A64-13				
2-Chlorophenol	52		5.0	0.400	ug/l	1	PREM	E111A64-13	87.2	96.0	39.9	Pass
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E111A64-13				
2-Methylphenol (o-Cresol)	13		5.0	0.420	ug/l	1	PREM	E111A64-13	30.4	36.5	10.5	Pass
2-Nitroaniline	ND<25	U	25	0.550	ug/l	1	PREM	E111A64-13				
2-Nitrophenol	19		5.0	0.420	ug/l	1	PREM	E111A64-13	28.7	32.2	14.0	Pass
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E111A64-13				
3-Nitroaniline	ND<25	U	25	0.440	ug/l	1	PREM	E111A64-13				
4,6-Dinitro-2-Methylphenol	44		5.0		ug/l	1	PREM	E111A64-13	60.2	65.9	26.3	Pass
4-Bromophenyl Phenyl ether	100		5.0	0.530	ug/l	1	PREM	E111A64-13	133	151	75.3	Pass
4-Chloro-3-Methylphenol	110		5.0	0.440	ug/l	1	PREM	E111A64-13'	158	180	85.7	Pass
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E111A64-13				
4-Chlorophenyl Phenyl ether	77		5.0	0.540	ug/l	1	PREM	E111A64-13	101	113	53.1	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E111A64-13				
4-Nitrophenol	ND<5.0	U	5.0	0.290	ug/l	1	PREM	E111A64-13				
Acenaphthene	68		5.0	0.450	ug/l	1	PREM	E111A64-13	83.3	93.9	43.9	Pass
Acenaphthylene	11		5.0	0.470	ug/l	1	PREM	E111A64-13	19.0	22.0	9.72	Pass
Anthracene	32		5.0	0.560	ug/l	1	PREM	E111A64-13	49.8	57.2	28.4	Pass
Benzo(a)anthracene	18		5.0	0.420	ug/l	1	PREM	E111A64-13	37.0	39.5	24.8	FAIL
Benzo(a)pyrene	8.8		5.0	0.350	ug/l	1	PREM	E111A64-13	20.0	22.9	9.42	FAIL
Benzo(b)fluoranthene	18		5.0	0.400	ug/l	1	PREM	E111A64-13	41.4	49.8	21.3	FAIL
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E111A64-13				
Benzo(k)fluoranthene	18		5.0	0.360	ug/l	1	PREM	E111A64-13	38.3	50.0	17.0	Pass
Benzyl Butyl Phthalate	44		5.0	0.460	ug/l	1	PREM	E111A64-13	56.6	68.5	21.5	Pass
Carbazole	ND<5.0	U	5.0		ug/l	1	PREM	E111A64-13				
Chrysene	22		5.0	0.440	ug/l	1	PREM	E111A64-13	48.6	56.0	27.7	FAIL
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E111A64-13				
Dibenz(a,h)anthracene	8.6		5.0	0.370	ug/l	1	PREM	E111A64-13	18.4	21.7	0	Pass
Dibenzofuran	30		10	0.480	ug/l	1	PREM	E111A64-13	43.8	49.9	21.7	Pass
Diethyl Phthalate	ND<5.0	U	5.0	0.660	ug/l	1	PREM	E111A64-13				
Dimethyl Phthalate	47		5.0	0.600	ug/l	1	PREM	E111A64-13	63.4	80.4	14.7	Pass
Fluoranthene	23		5.0	0.480	ug/l	1	PREM	E111A64-13	36.4	41.8	22.7	Pass
Fluorene	ND<5.0	U	5.0	0.540	ug/l	1	PREM	E111A64-13				
Hexachlorobenzene	33		5.0	0.550	ug/l	1	PREM	E111A64-13	70.0	80.5	40.6	FAIL

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Hexachlorobutadiene	ND<5.0	U	5.0	0.320	ug/l	1	PREM	E111A64-13				
Hexachlorocyclopentadiene	98		5.0	0.250	ug/l	1	PREM	E111A64-13	155	161	19.0	Pass
Hexachloroethane	ND<5.0	U	5.0	0.270	ug/l	1	PREM	E111A64-13				
Indeno(1,2,3-c,d)pyrene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E111A64-13				
Isophorone	ND<5.0	U	5.0	0.440	ug/l	1	PREM	E111A64-13				
Naphthalene	96		5.0	0.390	ug/l	1	PREM	E111A64-13	133	150	55.9	Pass
Nitrobenzene	23		5.0	0.380	ug/l	1	PREM	E111A64-13	36.7	41.8	19.2	Pass
Pentachlorophenol	46		5.0	0.380	ug/l	1	PREM	E111A64-13	67.4	80.1	28.1	Pass
Phenanthrene	78		5.0	0.560	ug/l	1	PREM	E111A64-13	96.1	110	51.2	Pass
Phenol	9.3		5.0	0.360	ug/l	1	PREM	E111A64-13	63.4	70.0	0	Pass
Pyrene	21		5.0	0.390	ug/l	1	PREM	E111A64-13	38.2	48.4	19.6	Pass
bis(2-Chloroethoxy) Methane	ND<5.0	U	5.0	0.460	ug/l	1	PREM	E111A64-13				
bis(2-Chloroethyl) ether (2-Chloroethyl	23		5.0	0.350	ug/l	1	PREM	E111A64-13	38.7	44.2	18.4	Pass
bis(2-Chloroisopropyl) ether	ND<10	U	10	0.310	ug/l	1	PREM	E111A64-13				
bis(2-Ethylhexyl) Phthalate	21		5.0	1.77	ug/l	1	PREM	E111A64-13	44.1	55.6	24.2	FAIL
di-n-Butyl Phthalate	ND<5.0	U	5.0	1.14	ug/l	1	PREM	E111A64-13				
di-n-Octylphthalate	ND<5.0	U	5.0	0.500	ug/l	1	PREM	E111A64-13				
n-Nitrosodi-n-Propylamine	33		5.0	0.580	ug/l	1	PREM	E111A64-13	49.6	57.0	23.0	Pass
n-Nitrosodiphenylamine	ND<5.0	U	5.0	0.640	ug/l	1	PREM	E111A64-13				

Location Identifier: WT-AC-03-009

Sample Identifier 2001335

11/27/2001 14:12

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.92		0.050		mg/L	5	PREM	E111A64-14	0.862	1.09	0.597	Pass

Location Identifier: WT-AC-03-010

Sample Identifier 2001336

11/27/2001 14:15

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.38		0.010	0	mg/L	1	PREM	E111A64-15	403	.461	.345	Pass
Barium	0.50		0.010	0.000680	mg/L	1	PREM	E111A64-15	486	.538	.434	Pass
Cadmium	0.12		0.0020	0.000320	mg/L	1	PREM	E111A64-15	129	.144	.114	Pass
Chromium, Total	0.20		0.010	0.000740	mg/L	1	PREM	E111A64-15	222	.246	.198	Pass
Copper	0.31		0.010	0.000870	mg/L	1	PREM	E111A64-15	344	.383	.305	Pass
Lead	0.31		0.0040	0.00175	mg/L	1	PREM	E111A64-15	339	.381	.297	Pass
Mercury	0.015		0.00020	0.000041	mg/L	1	PREM	E111A64-15				
Nickel	0.77		0.010	0.00108	mg/L	1	PREM	E111A64-15	826.0	.914	.738	Pass
Selenium	0.62		0.010	0.00460	mg/L	1	PREM	E111A64-15	0.655	.751	.559	Pass

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Silver	0.27	0.0020	0.00627	mg/L	1	PREM	E111A64-15	298	.334	.262	Pass
Zinc	1.0	0.010	0.00198	mg/L	1	PREM	E111A64-15	1110	1.250	.972	Pass

Location Identifier: WT-AC-03-011

Sample Identifier 2001358 11/27/2001 17:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A87-12				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A87-12				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A87-12				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A87-12				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A87-12				
PCB-1254 (Arochlor 1254)	2.5		0.40	0.120	ug/l	1	PREM	E111A87-12	2.92	3.45	1.76	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111A87-12				

Location Identifier: WT-AC-03-012

Sample Identifier 2001400 11/29/2001 13:40 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C12-10				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C12-10				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C12-10				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C12-10				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C12-10				
PCB-1254 (Arochlor 1254)	2.4		0.40	0.120	ug/l	1	PREM	E111C12-10	2.39	2.78	1.46	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C12-10				

Location Identifier: WT-AC-03-013

Sample Identifier 2001402 11/30/2001 12:45 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C70-7				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C70-7				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C70-7				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C70-7				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C70-7				
PCB-1254 (Arochlor 1254)	6.1		0.40	0.120	ug/l	1	PREM	E111C70-7	9.67	12.8	4.95	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E111C70-7				

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Location Identifier: WT-AC-03-014

Sample Identifier 2001403 11/30/2001 13:25 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E111C63-7				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E111C63-7				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E111C63-7				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E111C63-7				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E111C63-7				
PCB-1254 (Arochlor 1254)	4.0		0.41	0.120	ug/l	1	PREM	E111C63-7	5.09	6.72	2.61	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E111C63-7				

Location Identifier: WT-AC-03-015

Sample Identifier 2001404 11/30/2001 13:30 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.34		0.010	0	mg/L	1	PREM	E111C63-8	0.351	0.402	0.300	Pass
Barium	0.86		0.010	0.000680	mg/L	1	PREM	E111C63-8	0.838	0.928	0.746	Pass
Cadmium	0.44		0.0020	0.000320	mg/L	1	PREM	E111C63-8	0.483	0.539	0.427	Pass
Chromium, Total	0.26		0.010	0.000740	mg/L	1	PREM	E111C63-8	0.267	0.296	0.238	Pass
Copper	0.40		0.010	0.000870	mg/L	1	PREM	E111C63-8	0.424	0.471	0.377	Pass
Lead	0.22		0.0040	0.00175	mg/L	1	PREM	E111C63-8	0.229	0.257	0.201	Pass
Mercury	0.0026		0.00020	0.000022	mg/L	1	PREM	E111C63-8	0.002430	0.00304	0.00182	Pass
Nickel	0.62		0.010	0.00108	mg/L	1	PREM	E111C63-8	0.648	0.717	0.579	Pass
Selenium	0.48		0.010	0.00460	mg/L	1	PREM	E111C63-8	0.513	0.589	0.437	Pass
Silver	0.23		0.0020	0.00627	mg/L	1	PREM	E111C63-8	0.238	0.267	0.209	Pass
Zinc	0.30		0.010	0.00198	mg/L	1	PREM	E111C63-8	0.332	0.373	0.291	Pass

Location Identifier: WT-AC-03-016

Sample Identifier 2001405 11/30/2001 13:35 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.24		0.010		mg/L	1	PREM	E111C63-9	.214	.281	.142	Pass

Location Identifier: WT-AC-03-017

Sample Identifier 2001406 11/30/2001 13:40 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
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1,2,4-Trichlorobenzene	77		5.0	0.330	ug/l	1	PREM	E111C63-10	113	117	32.9	Pass	
1,2-Dichlorobenzene	81		5.0	0.400	ug/l	1	PREM	E111C63-10	121	138	28.3	Pass	
1,3-Dichlorobenzene	ND<5.0	U	5.0	0.310	ug/l	1	PREM	E111C63-10					
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E111C63-10					
2,4,5-Trichlorophenol	52		5.0	0.550	ug/l	1	PREM	E111C63-10	64.8	73.0	25.5	Pass	
2,4,6-Trichlorophenol	110		5.0	0.420	ug/l	1	PREM	E111C63-10	128	148	55.3	Pass	
2,4-Dichlorophenol	50		5.0	0.380	ug/l	1	PREM	E111C63-10	64.4	69.96	32.6	Pass	
2,4-Dimethylphenol	17		5.0	0.640	ug/l	1	PREM	E111C63-10	20.5	24.2	5.79	Pass	
2,4-Dinitrophenol	90		5.0	0.0700	ug/l	1	PREM	E111C63-10	161	170	27.1	Pass	
2,4-Dinitrotoluene	77		5.0	0.600	ug/l	1	PREM	E111C63-10	88.9	104	49.3	Pass	
2,6-Dinitrotoluene	46		5.0	0.530	ug/l	1	PREM	E111C63-10	56.3	63.7	30.0	Pass	
2-Chloronaphthalene	24		5.0	0.510	ug/l	1	PREM	E111C63-10	30.2	34.2	11.7	Pass	
2-Chlorophenol	13		5.0	0.400	ug/l	1	PREM	E111C63-10	15.5	18.6	0	Pass	
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E111C63-10					
2-Methylphenol (o-Cresol)	100		5.0	0.420	ug/l	1	PREM	E111C63-10	171	195	42.9	Pass	
2-Nitroaniline	ND<25	U	25	0.550	ug/l	1	PREM	E111C63-10					
2-Nitrophenol	22		5.0	0.420	ug/l	1	PREM	E111C63-10	28.0	31.4	13.7	Pass	
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E111C63-10					
3-Nitroaniline	ND<25	U	25	0.440	ug/l	1	PREM	E111C63-10					
4,6-Dinitro-2-Methylphenol	140		5.0		ug/l	1	PREM	E111C63-10	166	206	54.6	Pass	
4-Bromophenyl Phenyl ether	120		5.0	0.530	ug/l	1	PREM	E111C63-10	142	161	80.3	Pass	
4-Chloro-3-Methylphenol	120		5.0	0.440	ug/l	1	PREM	E111C63-10	144	164	78.0	Pass	
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E111C63-10					
4-Chlorophenyl Phenyl ether	23		5.0	0.540	ug/l	1	PREM	E111C63-10	29.0	33.1	15.1	Pass	
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E111C63-10					
4-Nitrophenol	29		5.0	0.290	ug/l	1	PREM	E111C63-10	77.6	87.3	0	Pass	
Acenaphthene	17		5.0	0.450	ug/l	1	PREM	E111C63-10	20.4	23.3	9.26	Pass	
Acenaphthylene	42		5.0	0.470	ug/l	1	PREM	E111C63-10	54.8	59.9	29.0	Pass	
Anthracene	49		5.0	0.560	ug/l	1	PREM	E111C63-10	57.2	65.5	31.7	Pass	
Benzo(a)anthracene	25		5.0	0.420	ug/l	1	PREM	E111C63-10	31.2	32.9	13.1	Pass	
Benzo(a)pyrene	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E111C63-10					
Benzo(b)fluoranthene	17		5.0	0.400	ug/l	1	PREM	E111C63-10	22.0	25.5	14.1	Pass	
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E111C63-10					
Benzo(k)fluoranthene	8.6		5.0	0.360	ug/l	1	PREM	E111C63-10	10.5	16.8	0	Pass	
Benzyl Butyl Phthalate	47		5.0	0.460	ug/l	1	PREM	E111C63-10	56.6	75.3	15.2	Pass	
Carbazole	ND<5.0	U	5.0		ug/l	1	PREM	E111C63-10					
Chrysene	34		5.0	0.440	ug/l	1	PREM	E111C63-10	40.4	46.4	23.6	Pass	
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E111C63-10					
Dibenz(a,h)anthracene	9.5		5.0	0.370	ug/l	1	PREM	E111C63-10	11.9	13.3	0	Pass	
Dibenzofuran	69		10	0.480	ug/l	1	PREM	E111C63-10	88.1	112	28.0	Pass	

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Diethyl Phthalate	24		5.0	0.660	ug/l	1	PREM	E111C63-10	26.0	34.6	0	Pass
Dimethyl Phthalate	130		5.0	0.600	ug/l	1	PREM	E111C63-10	160	197	0	Pass
Fluoranthene	12		5.0	0.480	ug/l	1	PREM	E111C63-10	13.8	15.8	0	Pass
Fluorene	69		5.0	0.540	ug/l	1	PREM	E111C63-10	90.3	103	50.9	Pass
Hexachlorobenzene	23		5.0	0.550	ug/l	1	PREM	E111C63-10	29.3	33.9	17.0	Pass
Hexachlorobutadiene	1.5		1.0	0.320	ug/l	1	PREM	E111C63-10	1.5	2.0	0.5	Pass
Hexachlorocyclopentadiene	100		5.0	0.250	ug/l	1	PREM	E111C63-10	117	122	13.8	Pass
Hexachloroethane	ND<5.0	U	5.0	0.270	ug/l	1	PREM	E111C63-10				
Indeno(1,2,3-c,d)pyrene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E111C63-10				
Isophorone	ND<5.0	U	5.0	0.440	ug/l	1	PREM	E111C63-10				
Naphthalene	46		5.0	0.390	ug/l	1	PREM	E111C63-10	64.0	72.8	29.0	Pass
Nitrobenzene	ND<5.0	U	5.0	0.380	ug/l	1	PREM	E111C63-10				
Pentachlorophenol	93		5.0	0.380	ug/l	1	PREM	E111C63-10	111	133	49.6	Pass
Phenanthrene	ND<5.0	U	5.0	0.560	ug/l	1	PREM	E111C63-10				
Phenol	35		5.0	0.360	ug/l	1	PREM	E111C63-10	117	127	0	Pass
Pyrene	120		5.0	0.390	ug/l	1	PREM	E111C63-10	142	167	71.2	Pass
bis(2-Chloroethoxy) Methane	ND<5.0	U	5.0	0.460	ug/l	1	PREM	E111C63-10				
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E111C63-10				
bis(2-Chloroisopropyl) ether	ND<10	U	10	0.310	ug/l	1	PREM	E111C63-10				
bis(2-Ethylhexyl) Phthalate	120		5.0	1.77	ug/l	1	PREM	E111C63-10	129	161	48.1	Pass
di-n-Butyl Phthalate	120		5.0	1.14	ug/l	1	PREM	E111C63-10	143	169	46.8	Pass
di-n-Octylphthalate	55		5.0	0.500	ug/l	1	PREM	E111C63-10	65.6	82.6	26.2	Pass
n-Nitrosodi-n-Propylamine	ND<5.0	U	5.0	0.580	ug/l	1	PREM	E111C63-10				
n-Nitrosodiphenylamine	ND<5.0	U	5.0	0.640	ug/l	1	PREM	E111C63-10				

Location Identifier: WT-AC-03-018

Sample Identifier 2001407 11/30/2001 13:45 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	50		2.0	0.750	mg/L	5	PREM	E111C63-11	37.9	39.5	22.7	FAIL

Location Identifier: WT-AC-03-019

Sample Identifier 2001408 11/30/2001 13:50 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	36		5.0	0.184	ug/l	1	PREM	E111C63-12	36.6	44.2	27.9	Pass
1,1,2,2-Tetrachloroethane	ND<5.0	U	5.0	0.243	ug/l	1	PREM	E111C63-12				
1,1,2-Trichloroethane	40		5.0	0.175	ug/l	1	PREM	E111C63-12	39.7	47.4	31.5	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E111C63-12				

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1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E111C63-12				
1,2-Dichloroethane	32		5.0	0.288	ug/l	1	PREM	E111C63-12	32.4	39.9	26.0	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E111C63-12				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E111C63-12				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E111C63-12				
Benzene	64		5.0	0.184	ug/l	1	PREM	E111C63-12	65.5	78.0	53.5	Pass
Bromodichloromethane	26		5.0	0.172	ug/l	1	PREM	E111C63-12	25.7	31.0	20.6	Pass
Bromoform	34		5.0	0.127	ug/l	1	PREM	E111C63-12	31.4	39.2	23.8	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E111C63-12				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E111C63-12				
Carbon Tetrachloride	24		5.0	0.228	ug/l	1	PREM	E111C63-12	24.2	31.0	18.3	Pass
Chlorobenzene	27		5.0	0.157	ug/l	1	PREM	E111C63-12	26.8	31.5	21.7	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E111C63-12				
Chloroform	71		5.0	0.226	ug/l	1	PREM	E111C63-12	70.2	83.0	55.5	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E111C63-12				
Dibromochloromethane	68		5.0	0.156	ug/l	1	PREM	E111C63-12	66.1	80.5	51.1	Pass
Ethylbenzene	23		5.0	0.176	ug/l	1	PREM	E111C63-12	23.1	27.6	18.0	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E111C63-12				
Methyl Isobutyl ketone (4-Methyl-2-Penta	72		10	1.89	ug/l	1	PREM	E111C63-12	72.0	96.7	44.3	Pass
Methylene Chloride	68		5.0	0.789	ug/l	1	PREM	E111C63-12	74.4	92.9	56.2	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E111C63-12				
Tetrachloroethylene (PCE)	60		5.0	0.171	ug/l	1	PREM	E111C63-12	59.9	70.5	45.8	Pass
Toluene	65		5.0	0.188	ug/l	1	PREM	E111C63-12	64.3	74.4	52.0	Pass
Trichloroethylene (TCE)	61		5.0	0.220	ug/l	1	PREM	E111C63-12	62.4	73.9	47.1	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E111C63-12				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E111C63-12				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E111C63-12				
o-Xylene (1,2-Dimethylbenzene)	86		5.0	0.171	ug/l	1	PREM	E111C63-12	88.2	108	61.7	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E111C63-12				

Location Identifier: WT-AC-03-020

Sample Identifier 2001428 12/03/2001 13:05 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112023-20				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112023-20				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112023-20				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112023-20				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112023-20				

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PCB-1254 (Arochlor 1254)	2.0		0.40	0.120	ug/l	1	PREM	E112023-20	1.93	2.55	0.988	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112023-20				

Location Identifier: WT-AC-03-021

Sample Identifier 2001429 12/03/2001 13:07 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.18		0.010	0	mg/L	1	PREM	E112023-21	0.190	0.224	0.155	Pass
Barium	0.41		0.010	0.000680	mg/L	1	PREM	E112023-21	0.407	0.463	0.351	Pass
Cadmium	0.039		0.0020	0.000320	mg/L	1	PREM	E112023-21	0.0423	0.0494	0.0353	Pass
Chromium, Total	0.18		0.010	0.000740	mg/L	1	PREM	E112023-21	0.194	0.221	0.167	Pass
Copper	0.12		0.010	0.000870	mg/L	1	PREM	E112023-21	0.131	0.146	0.115	Pass
Lead	0.25		0.0040	0.00175	mg/L	1	PREM	E112023-21	0.261	0.298	0.223	Pass
Mercury	0.0032		0.0002	0.000022	mg/L	1	PREM	E112023-21	0.003	0.004	0.002	Pass
Nickel	0.15		0.010	0.00108	mg/L	1	PREM	E112023-21	0.154	0.175	0.132	Pass
Selenium	0.23		0.010	0.00460	mg/L	1	PREM	E112023-21	0.231	0.269	0.180	Pass
Silver	0.29		0.0020	0.00627	mg/L	1	PREM	E112023-21	0.308	0.353	0.264	Pass
Zinc	0.098		0.010	0.00198	mg/L	1	PREM	E112023-21	0.55150	0.133	0.0970	Pass

Location Identifier: WT-AC-03-022

Sample Identifier 2001430 12/03/2001 13:14 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.42		0.010		mg/L	1	PREM	E112023-22	0.421	.535	.307	Pass

Location Identifier: WT-AC-03-023

Sample Identifier 2001431 12/03/2001 13:16 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	79		2.0	0.750	mg/L	5	PREM	E112023-23	63.1	78.9	37.9	FAIL

Location Identifier: WT-AC-03-024

Sample Identifier 2001432 12/03/2001 13:18 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	18		5.0	0.330	ug/l	1	PREM	E112023-24	24.1	27.8	10.9	Pass
1,2-Dichlorobenzene	79		5.0	0.400	ug/l	1	PREM	E112023-24	92.4	97.0	32.3	Pass
1,3-Dichlorobenzene	ND<5.0	U	5.0	0.310	ug/l	1	PREM	E112023-24				
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E112023-24				

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2,4,5-Trichlorophenol	80		5.0	0.550	ug/l	1	PREM	E112023-24	75.6	85.0	42.2	Pass
2,4,6-Trichlorophenol	52		5.0	0.420	ug/l	1	PREM	E112023-24	53.5	61.5	27.2	Pass
2,4-Dichlorophenol	90		5.0	0.380	ug/l	1	PREM	E112023-24	118	126	59.1	Pass
2,4-Dimethylphenol	42		5.0	0.640	ug/l	1	PREM	E112023-24	51.3	58.6	18.8	Pass
2,4-Dinitrophenol	100		5.0	0.0700	ug/l	1	PREM	E112023-24	138	148	24.1	Pass
2,4-Dinitrotoluene	90		5.0	0.600	ug/l	1	PREM	E112023-24	105	124	59.2	Pass
2,6-Dinitrotoluene	ND<5.0	U	5.0	0.530	ug/l	1	PREM	E112023-24				
2-Chloronaphthalene	15		5.0	0.510	ug/l	1	PREM	E112023-24	18.5	22.9	9.85	Pass
2-Chlorophenol	54		5.0	0.400	ug/l	1	PREM	E112023-24	62.0	68.7	29.1	Pass
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E112023-24				
2-Methylphenol (o-Cresol)	22		5.0	0.420	ug/l	1	PREM	E112023-24	28.9	33.0	12.2	Pass
2-Nitroaniline	ND<25	U	25	0.550	ug/l	1	PREM	E112023-24				
2-Nitrophenol	13		5.0	0.420	ug/l	1	PREM	E112023-24	14.9	16.3	7.67	Pass
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E112023-24				
3-Nitroaniline	ND<25	U	25	0.440	ug/l	1	PREM	E112023-24				
4,6-Dinitro-2-Methylphenol	100		5.0		ug/l	1	PREM	E112023-24	144	177	48.7	Pass
4-Bromophenyl Phenyl ether	100		5.0	0.530	ug/l	1	PREM	E112023-24	98.3	112	56.3	Pass
4-Chloro-3-Methylphenol	63		5.0	0.440	ug/l	1	PREM	E112023-24	66.4	75.4	35.1	Pass
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E112023-24				
4-Chlorophenyl Phenyl ether	86		5.0	0.540	ug/l	1	PREM	E112023-24	86.9	97.6	46.5	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E112023-24				
4-Nitrophenol	40		5.0	0.290	ug/l	1	PREM	E112023-24	64.6	73.9	0	Pass
Acenaphthene	ND<5.0	U	5.0	0.450	ug/l	1	PREM	E112023-24				
Acenaphthylene	15		5.0	0.470	ug/l	1	PREM	E112023-24	18.3	21.3	9.34	Pass
Anthracene	19		5.0	0.560	ug/l	1	PREM	E112023-24	20.6	23.3	11.2	Pass
Benzo(a)anthracene	21		5.0	0.420	ug/l	1	PREM	E112023-24	25.0	26.2	17.2	Pass
Benzo(a)pyrene	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E112023-24				
Benzo(b)fluoranthene	11		5.0	0.400	ug/l	1	PREM	E112023-24	15.1	17.9	8.61	Pass
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E112023-24				
Benzo(k)fluoranthene	ND<5.0	U	5.0	0.360	ug/l	1	PREM	E112023-24				
Benzyl Butyl Phthalate	100		5.0	0.460	ug/l	1	PREM	E112023-24	111	123	45.1	Pass
Carbazole	ND<5.0	U	5.0		ug/l	1	PREM	E112023-24				
Chrysene	22		5.0	0.440	ug/l	1	PREM	E112023-24	25.3	28.8	16.0	Pass
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E112023-24				
Dibenz(a,h)anthracene	ND<5.0	U	5.0	0.370	ug/l	1	PREM	E112023-24				
Dibenzofuran	62		10	0.480	ug/l	1	PREM	E112023-24	64.9	70.1	34.9	Pass
Diethyl Phthalate	130		5.0	0.660	ug/l	1	PREM	E112023-24	142	169	51.5	Pass
Dimethyl Phthalate	13		5.0	0.600	ug/l	1	PREM	E112023-24	14.5	17.1	5.54	Pass
Fluoranthene	17		5.0	0.480	ug/l	1	PREM	E112023-24	19.8	22.7	13.6	Pass
Fluorene	38		5.0	0.540	ug/l	1	PREM	E112023-24	39.4	45.6	22.5	Pass

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Hexachlorobenzene	ND<5.0	U	5.0	0.550	ug/l	1	PREM	E112023-24				
Hexachlorobutadiene	ND<5.0	U	5.0	0.320	ug/l	1	PREM	E112023-24				
Hexachlorocyclopentadiene	ND<5.0	U	5.0	0.250	ug/l	1	PREM	E112023-24				
Hexachloroethane	ND<5.0	U	5.0	0.270	ug/l	1	PREM	E112023-24				
Indeno(1,2,3-c,d)pyrene	14		5.0	0.400	ug/l	1	PREM	E112023-24	20.0	21.0	9.27	Pass
Isophorone	57		5.0	0.440	ug/l	1	PREM	E112023-24	58.1	67.3	31.0	Pass
Naphthalene	110		5.0	0.390	ug/l	1	PREM	E112023-24	139	156	58.2	Pass
Nitrobenzene	88		5.0	0.380	ug/l	1	PREM	E112023-24	98.0	112	48.1	Pass
Pentachlorophenol	81		5.0	0.380	ug/l	1	PREM	E112023-24	78.0	92.9	33.3	Pass
Phenanthrene	21		5.0	0.560	ug/l	1	PREM	E112023-24	24.4	27.3	14.5	Pass
Phenol	54		5.0	0.360	ug/l	1	PREM	E112023-24	134	145	29.7	Pass
Pyrene	28		5.0	0.390	ug/l	1	PREM	E112023-24	30.2	39.3	15.6	Pass
bis(2-Chloroethoxy) Methane	93		5.0	0.460	ug/l	1	PREM	E112023-24	118	124	62.2	Pass
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E112023-24				
bis(2-Chloroisopropyl) ether	ND<10	U	10	0.310	ug/l	1	PREM	E112023-24				
bis(2-Ethylhexyl) Phthalate	23		5.0	1.77	ug/l	1	PREM	E112023-24	20.9	26.6	14.1	Pass
di-n-Butyl Phthalate	ND<5.0	U	5.0	1.14	ug/l	1	PREM	E112023-24				
di-n-Octylphthalate	64		5.0	0.500	ug/l	1	PREM	E112023-24	61.1	77.2	24.7	Pass
n-Nitrosodi-n-Propylamine	ND<5.0	U	5.0	0.580	ug/l	1	PREM	E112023-24				
n-Nitrosodiphenylamine	37		5.0	0.640	ug/l	1	PREM	E112023-24	49.7	60.1	21.0	Pass

Location Identifier: WT-AC-03-025

Sample Identifier 2001433 12/03/2001 13:21 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	39		5.0	0.184	ug/l	1	PREM	E112023-25	35.6	43.0	27.1	Pass
1,1,2,2-Tetrachloroethane	110		5.0	0.243	ug/l	1	PREM	E112023-25	89.0	112	64.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E112023-25				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E112023-25				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E112023-25				
1,2-Dichloroethane	46		5.0	0.288	ug/l	1	PREM	E112023-25	44.7	54.8	35.7	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E112023-25				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E112023-25				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E112023-25				
Benzene	53		5.0	0.184	ug/l	1	PREM	E112023-25	50.0	59.6	40.8	Pass
Bromodichloromethane	29		5.0	0.172	ug/l	1	PREM	E112023-25	27.3	32.9	21.9	Pass
Bromoform	25		5.0	0.127	ug/l	1	PREM	E112023-25	25.6	32.0	19.2	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E112023-25				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E112023-25				

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Carbon Tetrachloride	42		5.0	0.228	ug/l	1	PREM	E112023-25	40.7	52.1	30.6	Pass
Chlorobenzene	59		5.0	0.157	ug/l	1	PREM	E112023-25	54.7	64.5	43.7	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E112023-25				
Chloroform	78		5.0	0.226	ug/l	1	PREM	E112023-25	72.1	85.2	56.9	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E112023-25				
Dibromochloromethane	23		5.0	0.156	ug/l	1	PREM	E112023-25	22.6	27.4	17.4	Pass
Ethylbenzene	61		5.0	0.176	ug/l	1	PREM	E112023-25	58.1	69.8	44.9	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E112023-25				
Methyl Isobutyl ketone (4-Methyl-2-Penta	86		10	1.89	ug/l	1	PREM	E112023-25	80.9	107	49.8	Pass
Methylene Chloride	54		5.0	0.789	ug/l	1	PREM	E112023-25	58.6	73.3	44.3	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E112023-25				
Tetrachloroethylene (PCE)	24		5.0	0.171	ug/l	1	PREM	E112023-25	27.1	32.1	20.7	Pass
Toluene	54		5.0	0.188	ug/l	1	PREM	E112023-25	53.0	61.4	42.8	Pass
Trichloroethylene (TCE)	38		5.0	0.220	ug/l	1	PREM	E112023-25	36.6	43.5	27.7	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E112023-25				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E112023-25				
m,p-Xylene (Sum of Isomers)	56		5.0	0.424	ug/l	1	PREM	E112023-25	54.2	67.5	37.8	Pass
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E112023-25				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E112023-25				

Location Identifier: WT-AC-03-026

Sample Identifier 2001440 12/04/2001 11:05 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112079-7				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112079-7				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112079-7				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112079-7				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112079-7				
PCB-1254 (Arochlor 1254)	6.0		0.40	0.120	ug/l	1	PREM	E112079-7	7.73	10.2	3.96	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112079-7				

Location Identifier: WT-AC-03-027

Sample Identifier 2001458 12/05/2001 13:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E112129-18				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E112129-18				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E112129-18				

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PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E112129-18				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E112129-18				
PCB-1254 (Arochlor 1254)	5.2		0.41	0.120	ug/l	1	PREM	E112129-18	6.11	8.06	3.13	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E112129-18				

Location Identifier: WT-AC-03-028

Sample Identifier 2001459 12/05/2001 13:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.15		0.010	0	mg/L	1	PREM	E112129-19	0.151	0.173	0.130	Pass
Barium	0.34		0.010	0.000680	mg/L	1	PREM	E112129-19	0.324	0.358	0.290	Pass
Cadmium	0.032		0.0020	0.000320	mg/L	1	PREM	E112129-19	0.0339	0.0378	0.030	Pass
Chromium, Total	0.15		0.010	0.000740	mg/L	1	PREM	E112129-19	0.155	0.172	0.138	Pass
Copper	0.10		0.010	0.000870	mg/L	1	PREM	E112129-19	0.104	0.116	0.092	Pass
Lead	0.21		0.0040	0.00175	mg/L	1	PREM	E112129-19	0.209	0.234	0.183	Pass
Mercury	0.0023		0.00020	0.000022	mg/L	1	PREM	E112129-19	0.02265	0.00283	0.00170	Pass
Nickel	0.12		0.010	0.00108	mg/L	1	PREM	E112129-19	0.122	0.135	0.110	Pass
Selenium	0.19		0.010	0.00460	mg/L	1	PREM	E112129-19	0.185	0.212	0.158	Pass
Silver	0.24		0.0020	0.00627	mg/L	1	PREM	E112129-19	0.246	0.276	0.217	Pass
Zinc	0.084		0.010	0.00198	mg/L	1	PREM	E112129-19	0.0912	0.102	0.0798	Pass

Location Identifier: WT-AC-03-029

Sample Identifier 2001460 12/05/2001 13:17 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.26		0.010		mg/L	1	PREM	E112129-20	0.257	0.331	0.182	Pass

Location Identifier: WT-AC-03-030

Sample Identifier 2001461 12/05/2001 13:19 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	50		5.2	0.330	ug/l	1	PREM	E112129-21	114	118	50.4	FAIL
1,2-Dichlorobenzene	16		5.2	0.400	ug/l	1	PREM	E112129-21	37	40.8	0	Pass
1,2-Dichlorobenzene	16		5.2	0.400	ug/l	1	PREM	E112129-21	37	40.8	0	Pass
1,3-Dichlorobenzene	ND<5.2	U	5.2	0.310	ug/l	1	PREM	E112129-21				
1,4-Dichlorobenzene	39		5.2	0.300	ug/l	1	PREM	E112129-21	98	107	0	Pass
2,4,5-Trichlorophenol	73		5.2	0.550	ug/l	1	PREM	E112129-21	147	165	75.6	FAIL
2,4,6-Trichlorophenol	75		5.2	0.420	ug/l	1	PREM	E112129-21	152	176	74.6	Pass
2,4-Dichlorophenol	56		5.2	0.380	ug/l	1	PREM	E112129-21	112	119	56	

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2,4-Dimethylphenol	47		5.2	0.640	ug/l	1	PREM	E112129-21	92.2	104	36	Pass
2,4-Dinitrophenol	45		5.2	0.0700	ug/l	1	PREM	E112129-21	105	117	19.7	Pass
2,4-Dinitrotoluene	32		5.2	0.600	ug/l	1	PREM	E112129-21	57	66.2	29.9	Pass
2,6-Dinitrotoluene	ND<5.2	U	5.2	0.530	ug/l	1	PREM	E112129-21				
2-Chloronaphthalene	58		5.2	0.510	ug/l	1	PREM	E112129-21	124	139	48	Pass
2-Chlorophenol	63		5.2	0.400	ug/l	1	PREM	E112129-21	131	143	58.6	Pass
2-Methylnaphthalene	ND<5.2	U	5.2	0.430	ug/l	1	PREM	E112129-21				
2-Methylnaphthalene	ND<5.2	U	5.2	0.430	ug/l	1	PREM	E112129-21				
2-Methylphenol (o-Cresol)	9.9		5.2	0.420	ug/l	1	PREM	E112129-21	20.5	23.4	5.2	Pass
2-Nitroaniline	ND<26	U	26	0.550	ug/l	1	PREM	E112129-21				
2-Nitrophenol	10		5.2	0.420	ug/l	1	PREM	E112129-21	21.3	23.7	10	
3,3'-Dichlorobenzidine	ND<5.2	U	5.2	0.730	ug/l	1	PREM	E112129-21				
3,3'-Dichlorobenzidine	ND<5.2	U	5.2	0.730	ug/l	1	PREM	E112129-21				
3-Nitroaniline	ND<26	U	26	0.440	ug/l	1	PREM	E112129-21				
4,6-Dinitro-2-Methylphenol	ND<5.2	U	5.2		ug/l	1	PREM	E112129-21				
4-Bromophenyl Phenyl ether	ND<5.2	U	5.2	0.530	ug/l	1	PREM	E112129-21				
4-Chloro-3-Methylphenol	32		5.2	0.440	ug/l	1	PREM	E112129-21	58.5	66.4	30.7	Pass
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E112129-21				
4-Chlorophenyl Phenyl ether	48		5.2	0.540	ug/l	1	PREM	E112129-21	95.2	107	50.4	FAIL
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E112129-21				
4-Nitrophenol	16		5.2	0.290	ug/l	1	PREM	E112129-21	78.4	88.1	0	Pass
Acenaphthene	ND<5.2	U	5.2	0.450	ug/l	1	PREM	E112129-21				
Acenaphthylene	21		5.2	0.470	ug/l	1	PREM	E112129-21	39.8	44	20.9	Pass
Anthracene	47		5.2	0.560	ug/l	1	PREM	E112129-21	91.1	104	47.2	FAIL
Benzo(a)anthracene	22		5.2	0.420	ug/l	1	PREM	E112129-21	42.7	46	28.3	FAIL
Benzo(a)pyrene	ND<5.2	U	5.2	0.350	ug/l	1	PREM	E112129-21				
Benzo(b)fluoranthene	25		5.2	0.400	ug/l	1	PREM	E112129-21	57.6	70.1	27.2	FAIL
Benzo(g,h,i)perylene	15		5.2	0.420	ug/l	1	PREM	E112129-21	22.8	28.8	0	Pass
Benzo(k)fluoranthene	ND<5.2	U	5.2	0.360	ug/l	1	PREM	E112129-21				
Benzyl Butyl Phthalate	ND<5.2	U	5.2	0.460	ug/l	1	PREM	E112129-21				
Carbazole	ND<5.2	U	5.2		ug/l	1	PREM	E112129-21				
Chrysene	32		5.2	0.440	ug/l	1	PREM	E112129-21	60.3	69.7	33.5	FAIL
Cresol,m- & p-	ND<5.2	U	5.2	0.740	ug/l	1	PREM	E112129-21				
Dibenz(a,h)anthracene	19		5.2	0.370	ug/l	1	PREM	E112129-21	29.8	36.5	13.1	Pass
Dibenzofuran	70		10	0.480	ug/l	1	PREM	E112129-21	148	179	45.4	Pass
Diethyl Phthalate	39		5.2	0.660	ug/l	1	PREM	E112129-21	80.9	103	22	Pass
Dimethyl Phthalate	30		5.2	0.600	ug/l	1	PREM	E112129-21	58.6	74.6	15.3	Pass
Fluoranthene	ND<5.2	U	5.2	0.480	ug/l	1	PREM	E112129-21				
Fluorene	22		5.2	0.540	ug/l	1	PREM	E112129-21	42.2	48.7	24.1	FAIL
Hexachlorobenzene	ND<5.2	U	5.2	0.550	ug/l	1	PREM	E112129-21				

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Hexachlorobutadiene	63		5.2	0.320	ug/l	1	PREM	E112129-21	166	170	57.6	Pass
Hexachlorocyclopentadiene	ND<5.2	U	5.2	0.250	ug/l	1	PREM	E112129-21				
Hexachloroethane	ND<5.2	U	5.2	0.270	ug/l	1	PREM	E112129-21				
Indeno(1,2,3-c,d)pyrene	23		5.2	0.400	ug/l	1	PREM	E112129-21	37.8	43.3	14.2	Pass
Isophorone	74		5.2	0.440	ug/l	1	PREM	E112129-21	139	162	70	Pass
Naphthalene	60		5.2	0.390	ug/l	1	PREM	E112129-21	140	158	58.6	Pass
Naphthalene	60		5.2	0.390	ug/l	1	PREM	E112129-21	140	158	58.6	Pass
Nitrobenzene	28		5.2	0.380	ug/l	1	PREM	E112129-21	56.8	64.8	28.6	FAIL
Pentachlorophenol	66		5.2	0.380	ug/l	1	PREM	E112129-21	128	153	58	Pass
Phenanthrene	28		5.2	0.560	ug/l	1	PREM	E112129-21	53.5	60.7	32.6	FAIL
Phenol	9.4		5.2	0.360	ug/l	1	PREM	E112129-21	41.2	46.4	0	Pass
Pyrene	19		5.2	0.390	ug/l	1	PREM	E112129-21	35.4	45.2	18.2	Pass
bis(2-Chloroethoxy) Methane	18		5.2	0.460	ug/l	1	PREM	E112129-21	47.2	50.8	24.9	FAIL
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.2	U	5.2	0.350	ug/l	1	PREM	E112129-21				
bis(2-Chloroisopropyl) ether	14		10	0.310	ug/l	1	PREM	E112129-21	33.4	35	14	
bis(2-Ethylhexyl) Phthalate	60		5.2	1.77	ug/l	1	PREM	E112129-21	121	151	45.8	Pass
di-n-Butyl Phthalate	20		5.2	1.14	ug/l	1	PREM	E112129-21	37.6	47.8	20.7	FAIL
di-n-Octylphthalate	ND<5.2	U	5.2	0.500	ug/l	1	PREM	E112129-21				
n-Nitrosodi-n-Propylamine	70		5.2	0.580	ug/l	1	PREM	E112129-21	131	149	62.4	Pass
n-Nitrosodiphenylamine	ND<5.2	U	5.2	0.640	ug/l	1	PREM	E112129-21				

Location Identifier: WT-AC-03-031

Sample Identifier 2001462 12/05/2001 13:21 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	84		2.0	0.750	mg/L	5	PREM	E112129-22	69.5	86.9	41.7	Pass

Location Identifier: WT-AC-03-032

Sample Identifier 2001463 12/05/2001 13:25 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	47		5.0	0.184	ug/l	1	PREM	E112129-23	39.6	47.8	30.1	Pass
1,1,2,2-Tetrachloroethane	150		5.0	0.243	ug/l	1	PREM	E112129-23	133	168	96.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E112129-23				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E112129-23				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E112129-23				
1,2-Dichloroethane	76		5.0	0.288	ug/l	1	PREM	E112129-23	73.8	90.0	58.7	Pass
1,2-Dichloropropane	72		5.0	0.234	ug/l	1	PREM	E112129-23	64.5	75.5	50.3	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E112129-23				

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Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E112129-23				
Benzene	36		5.0	0.184	ug/l	1	PREM	E112129-23	30.1	36.1	24.4	Pass
Bromodichloromethane	62		5.0	0.172	ug/l	1	PREM	E112129-23	55.3	66.5	44.7	Pass
Bromoform	66		5.0	0.127	ug/l	1	PREM	E112129-23	66.4	82.9	51.5	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E112129-23				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E112129-23				
Carbon Tetrachloride	42		5.0	0.228	ug/l	1	PREM	E112129-23	33.9	43.4	25.5	Pass
Chlorobenzene	16		5.0	0.157	ug/l	1	PREM	E112129-23	14.4	16.9	12.0	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E112129-23				
Chloroform	16		5.0	0.226	ug/l	1	PREM	E112129-23	13.8	16.6	11.2	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E112129-23				
Dibromochloromethane	48		5.0	0.156	ug/l	1	PREM	E112129-23	43.5	52.9	33.6	Pass
Ethylbenzene	30		5.0	0.176	ug/l	1	PREM	E112129-23	27.1	32.4	21.1	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E112129-23				
Methyl Isobutyl ketone (4-Methyl-2-Penta	53		10	1.89	ug/l	1	PREM	E112129-23	59.8	75.9	35.1	Pass
Methylene Chloride	34		5.0	0.789	ug/l	1	PREM	E112129-23	27.8	35.2	21.1	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E112129-23				
Tetrachloroethylene (PCE)	61		5.0	0.171	ug/l	1	PREM	E112129-23	50.3	59.3	38.5	FAIL
Toluene	45		5.0	0.188	ug/l	1	PREM	E112129-23	40.2	46.7	32.4	Pass
Trichloroethylene (TCE)	30		5.0	0.220	ug/l	1	PREM	E112129-23	24.8	29.5	18.9	FAIL
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E112129-23				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E112129-23				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E112129-23				
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E112129-23				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E112129-23				

Location Identifier: WT-AC-03-033

Sample Identifier 2001475 12/07/2001 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E112249-12				
PCB-1221 (Arochlor 1221)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E112249-12				
PCB-1232 (Arochlor 1232)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E112249-12				
PCB-1242 (Arochlor 1242)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E112249-12				
PCB-1248 (Arochlor 1248)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E112249-12				
PCB-1254 (Arochlor 1254)	6.7		0.42	0.120	ug/l	1	PREM	E112249-12	8.14	10.7	4.17	Pass
PCB-1260 (Arochlor 1260)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E112249-12				

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Location Identifier: WT-AC-03-034

Sample Identifier 2001476

12/07/2001

13:03

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.40		0.010	0	mg/L	1	PREM	E112249-13	0.421	0.482	0.360	Pass
Barium	1.0		0.010	0.000680	mg/L	1	PREM	E112249-13	1.010	1.110	0.898	Pass
Cadmium	0.53		0.0020	0.000320	mg/L	1	PREM	E112249-13	0.580	0.647	0.512	Pass
Chromium, Total	0.32		0.010	0.000740	mg/L	1	PREM	E112249-13	0.320	0.355	0.286	Pass
Copper	0.49		0.010	0.000870	mg/L	1	PREM	E112249-13	0.509	0.565	0.452	Pass
Lead	0.27		0.0040	0.00175	mg/L	1	PREM	E112249-13	0.275	0.308	0.241	Pass
Mercury	0.0022		0.00020	0.000022	mg/L	1	PREM	E112249-13	0.00292	0.00365	0.00218	Pass
Nickel	0.76		0.010	0.00108	mg/L	1	PREM	E112249-13	0.778	0.860	0.695	Pass
Selenium	0.58		0.010	0.00460	mg/L	1	PREM	E112249-13	0.616	0.707	0.524	Pass
Silver	0.28		0.0020	0.00627	mg/L	1	PREM	E112249-13	0.286	0.320	0.251	Pass
Zinc	0.38		0.010	0.00198	mg/L	1	PREM	E112249-13	0.398	0.448	0.349	Pass

Location Identifier: WT-AC-03-035

Sample Identifier 2001477

12/07/2001

13:05

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.87		0.050		mg/L	5	PREM	E112249-14	0.862	1.11	0.600	Pass

Location Identifier: WT-AC-03-036

Sample Identifier 2001478

12/07/2001

13:06

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	71		5.0	0.330	ug/l	1	PREM	E112249-15	112	118	49.5	Pass
1,2-Dichlorobenzene	24		5.0	0.400	ug/l	1	PREM	E112249-15	30.8	33.3	0	Pass
1,3-Dichlorobenzene	ND<5.0	U	5.0	0.310	ug/l	1	PREM	E112249-15				
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E112249-15				
2,4,5-Trichlorophenol	60		5.0	0.550	ug/l	1	PREM	E112249-15	83.8	94.2	46.0	Pass
2,4,6-Trichlorophenol	56		5.0	0.420	ug/l	1	PREM	E112249-15	76.1	87.8	38.1	Pass
2,4-Dichlorophenol	39		5.0	0.380	ug/l	1	PREM	E112249-15	49.0	53.9	25.0	Pass
2,4-Dimethylphenol	72		5.0	0.640	ug/l	1	PREM	E112249-15	113	128	44.8	Pass
2,4-Dinitrophenol	100		5.0	0.0700	ug/l	1	PREM	E112249-15	145	155	25.0	Pass
2,4-Dinitrotoluene	40		5.0	0.600	ug/l	1	PREM	E112249-15	48.2	55.6	24.5	Pass
2,6-Dinitrotoluene	69		5.0	0.530	ug/l	1	PREM	E112249-15	92.5	107	49.6	Pass
2-Chloronaphthalene	120		5.0	0.510	ug/l	1	PREM	E112249-15	177	186	92.6	Pass

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2-Chlorophenol	100		5.0	0.400	ug/l	1	PREM	E112249-15	170	185	75.3	Pass
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E112249-15				
2-Methylphenol (o-Cresol)	45		5.0	0.420	ug/l	1	PREM	E112249-15	71.4	92.3	17.1	Pass
2-Nitroaniline	ND<25	U	25	0.550	ug/l	1	PREM	E112249-15				
2-Nitrophenol	25		5.0	0.420	ug/l	1	PREM	E112249-15	29.4	33.0	14.4	Pass
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E112249-15				
3-Nitroaniline	ND<25	U	25	0.440	ug/l	1	PREM	E112249-15				
4,6-Dinitro-2-Methylphenol	71		5.0		ug/l	1	PREM	E112249-15	72.8	82.5	29.7	Pass
4-Bromophenyl Phenyl ether	140		5.0	0.530	ug/l	1	PREM	E112249-15	177	201	99.4	Pass
4-Chloro-3-Methylphenol	ND<5.0	U	5.0	0.440	ug/l	1	PREM	E112249-15				
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E112249-15				
4-Chlorophenyl Phenyl ether	ND<5.0	U	5.0	0.540	ug/l	1	PREM	E112249-15				
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E112249-15				
4-Nitrophenol	25		5.0	0.290	ug/l	1	PREM	E112249-15	60.3	69.5	0	Pass
Acenaphthene	40		5.0	0.450	ug/l	1	PREM	E112249-15	55.6	62.8	29.8	Pass
Acenaphthylene	ND<5.0	U	5.0	0.470	ug/l	1	PREM	E112249-15				
Anthracene	190		5.0	0.560	ug/l	1	PREM	E112249-15	172	194	84.2	Pass
Benzo(a)anthracene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E112249-15				
Benzo(a)pyrene	24		5.0	0.350	ug/l	1	PREM	E112249-15	24.7	28.2	11.6	Pass
Benzo(b)fluoranthene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E112249-15				
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E112249-15				
Benzo(k)fluoranthene	23		5.0	0.360	ug/l	1	PREM	E112249-15	23.9	32.8	10.5	Pass
Benzyl Butyl Phthalate	52		5.0	0.460	ug/l	1	PREM	E112249-15	65.9	87.2	15.3	Pass
Carbazole	ND<5.0	U	5.0		ug/l	1	PREM	E112249-15				
Chrysene	42		5.0	0.440	ug/l	1	PREM	E112249-15	46.4	53.5	26.6	Pass
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E112249-15				
Dibenz(a,h)anthracene	ND<5.0	U	5.0	0.370	ug/l	1	PREM	E112249-15				
Dibenzofuran	50		10	0.480	ug/l	1	PREM	E112249-15	71.8	93.5	23.9	Pass
Diethyl Phthalate	ND<5.0	U	5.0	0.660	ug/l	1	PREM	E112249-15				
Dimethyl Phthalate	47		5.0	0.600	ug/l	1	PREM	E112249-15	61.4	78.0	14.9	Pass
Fluoranthene	13		5.0	0.480	ug/l	1	PREM	E112249-15	13.9	15.9	10.4	Pass
Fluorene	42		5.0	0.540	ug/l	1	PREM	E112249-15	42.9	49.5	24.4	Pass
Hexachlorobenzene	32		5.0	0.550	ug/l	1	PREM	E112249-15	38.1	44.0	22.1	Pass
Hexachlorobutadiene	ND<5.0	U	5.0	0.320	ug/l	1	PREM	E112249-15				
Hexachlorocyclopentadiene	ND<5.0	U	5.0	0.250	ug/l	1	PREM	E112249-15				
Hexachloroethane	50		5.0	0.270	ug/l	1	PREM	E112249-15	72.9	77.5	21.7	Pass
Indeno(1,2,3-c,d)pyrene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E112249-15				
Isophorone	47		5.0	0.440	ug/l	1	PREM	E112249-15	55.8	64.6	29.9	Pass
Naphthalene	70		5.0	0.390	ug/l	1	PREM	E112249-15	90.2	102	39.2	Pass
Nitrobenzene	54		5.0	0.380	ug/l	1	PREM	E112249-15	73.9	84.4	36.7	Pass

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Pentachlorophenol	52		5.0	0.380	ug/l	1	PREM	E112249-15	57.8	68.6	23.3	Pass
Phenanthrene	70		5.0	0.560	ug/l	1	PREM	E112249-15	77.3	88.5	43.0	Pass
Phenol	10		5.0	0.360	ug/l	1	PREM	E112249-15	26.6	30.9	0	Pass
Pyrene	17		5.0	0.390	ug/l	1	PREM	E112249-15	19.0	26.5	10.0	Pass
bis(2-Chloroethoxy) Methane	ND<5.0	U	5.0	0.460	ug/l	1	PREM	E112249-15				
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E112249-15				
bis(2-Chloroisopropyl) ether	82		10	0.310	ug/l	1	PREM	E112249-15	131	151	32.3	Pass
bis(2-Ethylhexyl) Phthalate	69		5.0	1.77	ug/l	1	PREM	E112249-15	98.2	123	39.4	Pass
di-n-Butyl Phthalate	ND<5.0	U	5.0	1.14	ug/l	1	PREM	E112249-15				
di-n-Octylphthalate	40		5.0	0.500	ug/l	1	PREM	E112249-15	44.6	57.4	19.5	Pass
n-Nitrosodi-n-Propylamine	ND<5.0	U	5.0	0.580	ug/l	1	PREM	E112249-15				
n-Nitrosodiphenylamine	37		5.0	0.640	ug/l	1	PREM	E112249-15	41.6	50.9	17.6	Pass

Location Identifier: WT-AC-03-037

Sample Identifier 2001479 12/07/2001 13:08 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	91		2.0	0.750	mg/L	5	PREM	E112249-16	82.1	103	49.3	Pass

Location Identifier: WT-AC-03-038

Sample Identifier 2001480 12/07/2001 13:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	ND<250	U	250	9.20	ug/l	50	PREM	E112249-17	65.4	79.0	49.5	FAIL
1,1,2,2-Tetrachloroethane	ND<250	U	250	12.2	ug/l	50	PREM	E112249-17	34.6	43.7	24.6	FAIL
1,1,2-Trichloroethane	ND<250	U	250	8.75	ug/l	50	PREM	E112249-17	74.4	89.0	58.4	FAIL
1,1-Dichloroethane	ND<250	U	250	11.4	ug/l	50	PREM	E112249-17				
1,1-Dichloroethene	ND<250	U	250	13.7	ug/l	50	PREM	E112249-17				
1,2-Dichloroethane	ND<250	U	250	14.4	ug/l	50	PREM	E112249-17	26.8	33.2	21.6	FAIL
1,2-Dichloropropane	ND<250	U	250	11.7	ug/l	50	PREM	E112249-17	101	118	78.1	FAIL
2-Hexanone	ND<500	U	500	94.0	ug/l	50	PREM	E112249-17				
Acetone	ND<1000	U	1000	132	ug/l	50	PREM	E112249-17				
Benzene	7800		250	9.20	ug/l	50	PREM	E112249-17	7.93	9.82	6.22	FAIL
Bromodichloromethane	ND<250	U	250	8.60	ug/l	50	PREM	E112249-17	19.7	23.8	15.8	FAIL
Bromoform	ND<250	U	250	6.35	ug/l	50	PREM	E112249-17	39.6	49.5	30.3	FAIL
Bromomethane	ND<250	U	250	8.35	ug/l	50	PREM	E112249-17				
Carbon Disulfide	ND<250	U	250	24.9	ug/l	50	PREM	E112249-17				
Carbon Tetrachloride	ND<250	U	250	11.4	ug/l	50	PREM	E112249-17	55.3	70.7	41.5	FAIL
Chlorobenzene	ND<250	U	250	7.85	ug/l	50	PREM	E112249-17	24.8	29.2	20.2	FAIL

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Chloroethane	ND<250	U	250	26.2	ug/l	50	PREM	E112249-17				
Chloroform	ND<250	U	250	11.3	ug/l	50	PREM	E112249-17	38.5	45.7	30.6	FAIL
Chloromethane	ND<250	U	250	7.40	ug/l	50	PREM	E112249-17				
Dibromochloromethane	ND<250	U	250	7.80	ug/l	50	PREM	E112249-17	15.1	18.3	11.6	FAIL
Ethylbenzene	ND<250	U	250	8.80	ug/l	50	PREM	E112249-17	70.2	84.4	54.2	FAIL
Methyl Ethyl ketone (2-Butanone)	ND<500	U	500	96.8	ug/l	50	PREM	E112249-17				
Methyl Isobutyl ketone (4-Methyl-2-Penta	ND<500	U	500	94.5	ug/l	50	PREM	E112249-17	73.1	99.3	44.9	FAIL
Methylene Chloride	ND<250	U	250	39.4	ug/l	50	PREM	E112249-17	34.7	43.8	26.3	FAIL
Styrene	ND<250	U	250	8.50	ug/l	50	PREM	E112249-17				
Tetrachloroethylene (PCE)	ND<250	U	250	8.55	ug/l	50	PREM	E112249-17	70.4	82.7	53.8	FAIL
Toluene	ND<250	U	250	9.40	ug/l	50	PREM	E112249-17	30.5	35.6	24.5	FAIL
Trichloroethylene (TCE)	ND<250	U	250	11.0	ug/l	50	PREM	E112249-17	34.6	41.1	26.2	FAIL
Vinyl Chloride	ND<250	U	250	5.55	ug/l	50	PREM	E112249-17				
cis-1,3-Dichloropropene	ND<250	U	250	6.95	ug/l	50	PREM	E112249-17				
m,p-Xylene (Sum of Isomers)	ND<250	U	250	21.2	ug/l	50	PREM	E112249-17				
o-Xylene (1,2-Dimethylbenzene)	ND<250	U	250	8.55	ug/l	50	PREM	E112249-17	38.2	48.3	26.6	FAIL
trans-1,3-Dichloropropene	ND<250	U	250	3.40	ug/l	50	PREM	E112249-17				

Location Identifier: WT-AC-03-039

Sample Identifier	2001488	12/12/2001	12:50	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.44	U	0.44	0.120	ug/l	1	PREM	E112477-8				
PCB-1221 (Arochlor 1221)	ND<0.44	U	0.44	0.120	ug/l	1	PREM	E112477-8				
PCB-1232 (Arochlor 1232)	ND<0.44	U	0.44	0.120	ug/l	1	PREM	E112477-8				
PCB-1242 (Arochlor 1242)	ND<0.44	U	0.44	0.120	ug/l	1	PREM	E112477-8				
PCB-1248 (Arochlor 1248)	ND<0.44	U	0.44	0.120	ug/l	1	PREM	E112477-8				
PCB-1254 (Arochlor 1254)	3.2		0.44	0.120	ug/l	1	PREM	E112477-8	3.22	4.25	1.65	Pass
PCB-1260 (Arochlor 1260)	ND<0.44	U	0.44	0.120	ug/l	1	PREM	E112477-8				

Location Identifier: WT-AC-03-040

Sample Identifier	2001489	12/12/2001	12:52	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.40		0.010	0	mg/L	1	PREM	E112477-9	0.403	0.461	0.345	Pass
Barium	0.55		0.010	0.000680	mg/L	1	PREM	E112477-9	0.486	.538	0.434	FAIL
Cadmium	0.12		0.0020	0.000320	mg/L	1	PREM	E112477-9	0.129	0.144	0.114	Pass
Chromium, Total	0.21		0.010	0.000740	mg/L	1	PREM	E112477-9	0.222	0.246	0.198	Pass
Copper	0.33		0.010	0.000870	mg/L	1	PREM	E112477-9	0.344	0.383	0.305	Pass

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Lead	0.33	0.0040	0.00175	mg/L	1	PREM	E112477-9	0.339	0.381	0.297	Pass
Mercury	0.014	0.0002	0.000022	mg/L	1	PREM	E112477-9	0.0168	0.210	0.0126	Pass
Nickel	0.82	0.010	0.00108	mg/L	1	PREM	E112477-9	0.826	0.914	0.738	Pass
Selenium	0.64	0.010	0.00460	mg/L	1	PREM	E112477-9	0.655	0.751	0.559	Pass
Silver	0.29	0.0020	0.00627	mg/L	1	PREM	E112477-9	0.298	0.334	0.262	Pass
Zinc	1.0	0.010	0.00198	mg/L	1	PREM	E112477-9	1.110	1.250	0.972	Pass

Location Identifier: WT-AC-03-041

Sample Identifier 2001490 12/12/2001 12:54 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	1.0		0.050		mg/L	5	PREM	E112477-10	1.03	1.31	0.716	Pass

Location Identifier: WT-AC-03-042

Sample Identifier 2001491 12/12/2001 12:57 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	91		5.0	0.330	ug/l	1	PREM	E112477-11	150	155	66.2	Pass
1,2-Dichlorobenzene	22		5.0	0.400	ug/l	1	PREM	E112477-11	27.2	30.4	6.64	Pass
1,3-Dichlorobenzene	41		5.0	0.310	ug/l	1	PREM	E112477-11	58.9	64.8	15.1	Pass
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E112477-11				
2,4,5-Trichlorophenol	78		5.0	0.550	ug/l	1	PREM	E112477-11	112	126	59.2	Pass
2,4,6-Trichlorophenol	95		5.0	0.420	ug/l	1	PREM	E112477-11	146	169	71.7	Pass
2,4-Dichlorophenol	130		5.0	0.380	ug/l	1	PREM	E112477-11	189	199	94.3	Pass
2,4-Dimethylphenol	80		5.0	0.640	ug/l	1	PREM	E112477-11	123	139	49.0	Pass
2,4-Dinitrophenol	130		5.0	0.0700	ug/l	1	PREM	E112477-11	184	191	30.1	Pass
2,4-Dinitrotoluene	45		5.0	0.600	ug/l	1	PREM	E112477-11	55.4	64.2	28.9	Pass
2,6-Dinitrotoluene	130		5.0	0.530	ug/l	1	PREM	E112477-11	165	193	89.1	Pass
2-Chloronaphthalene	ND<5.0	U	5.0	0.510	ug/l	1	PREM	E112477-11				
2-Chlorophenol	59		5.0	0.400	ug/l	1	PREM	E112477-11	87.2	96.0	39.9	Pass
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E112477-11				
2-Methylphenol (o-Cresol)	22		5.0	0.420	ug/l	1	PREM	E112477-11	30.4	36.5	10.5	Pass
2-Nitroaniline	ND<25	U	25	0.550	ug/l	1	PREM	E112477-11				
2-Nitrophenol	24		5.0	0.420	ug/l	1	PREM	E112477-11	28.7	32.2	14.0	Pass
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E112477-11				
3-Nitroaniline	ND<25	U	25	0.440	ug/l	1	PREM	E112477-11				
4,6-Dinitro-2-Methylphenol	61		5.0		ug/l	1	PREM	E112477-11	60.2	65.9	26.3	Pass
4-Bromophenyl Phenyl ether	96		5.0	0.530	ug/l	1	PREM	E112477-11	133	151	75.3	Pass
4-Chloro-3-Methylphenol	120		5.0	0.440	ug/l	1	PREM	E112477-11	158	180	85.7	Pass

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4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E112477-11				
4-Chlorophenyl Phenyl ether	98		5.0	0.540	ug/l	1	PREM	E112477-11	101	113	53.1	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E112477-11				
4-Nitrophenol	ND<5.0	U	5.0	0.290	ug/l	1	PREM	E112477-11				
Acenaphthene	56		5.0	0.450	ug/l	1	PREM	E112477-11	83.3	93.9	43.9	Pass
Acenaphthylene	16		5.0	0.470	ug/l	1	PREM	E112477-11	19.0	22.0	9.72	Pass
Anthracene	52		5.0	0.560	ug/l	1	PREM	E112477-11	49.8	57.2	28.4	Pass
Benzo(a)anthracene	34		5.0	0.420	ug/l	1	PREM	E112477-11	37.0	39.5	24.8	Pass
Benzo(a)pyrene	19		5.0	0.350	ug/l	1	PREM	E112477-11	20.0	22.9	9.42	Pass
Benzo(b)fluoranthene	36		5.0	0.400	ug/l	1	PREM	E112477-11	41.4	49.8	21.3	Pass
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E112477-11				
Benzo(k)fluoranthene	38		5.0	0.360	ug/l	1	PREM	E112477-11	38.3	50.0	17.0	Pass
Benzyl Butyl Phthalate	47		5.0	0.460	ug/l	1	PREM	E112477-11	56.6	68.5	21.5	Pass
Carbazole	ND<5.0	U	5.0		ug/l	1	PREM	E112477-11				
Chrysene	38		5.0	0.440	ug/l	1	PREM	E112477-11	48.6	56.0	27.7	Pass
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E112477-11				
Dibenz(a,h)anthracene	20		5.0	0.370	ug/l	1	PREM	E112477-11	18.4	21.7	0	Pass
Dibenzofuran	35		10	0.480	ug/l	1	PREM	E112477-11	43.8	49.9	21.7	Pass
Diethyl Phthalate	ND<5.0	U	5.0	0.660	ug/l	1	PREM	E112477-11				
Dimethyl Phthalate	50		5.0	0.600	ug/l	1	PREM	E112477-11	63.4	80.4	14.7	Pass
Fluoranthene	33		5.0	0.480	ug/l	1	PREM	E112477-11	36.4	41.8	22.7	Pass
Fluorene	ND<5.0	U	5.0	0.540	ug/l	1	PREM	E112477-11				
Hexachlorobenzene	53		5.0	0.550	ug/l	1	PREM	E112477-11	70.0	80.5	40.6	Pass
Hexachlorobutadiene	ND<5.0	U	5.0	0.320	ug/l	1	PREM	E112477-11				
Hexachlorocyclopentadiene	130		5.0	0.250	ug/l	1	PREM	E112477-11	155	161	19.0	Pass
Hexachloroethane	ND<5.0	U	5.0	0.270	ug/l	1	PREM	E112477-11				
Indeno(1,2,3-c,d)pyrene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E112477-11				
Isophorone	ND<5.0	U	5.0	0.440	ug/l	1	PREM	E112477-11				
Naphthalene	110		5.0	0.390	ug/l	1	PREM	E112477-11	133	150	55.9	Pass
Nitrobenzene	29		5.0	0.380	ug/l	1	PREM	E112477-11	36.7	41.8	19.2	Pass
Pentachlorophenol	62		5.0	0.380	ug/l	1	PREM	E112477-11	67.4	80.1	28.1	Pass
Phenanthrene	87		5.0	0.560	ug/l	1	PREM	E112477-11	96.1	110	51.2	Pass
Phenol	21		5.0	0.360	ug/l	1	PREM	E112477-11	63.4	70.0	0	Pass
Pyrene	31		5.0	0.390	ug/l	1	PREM	E112477-11	38.2	48.4	19.6	Pass
bis(2-Chloroethoxy) Methane	ND<5.0	U	5.0	0.460	ug/l	1	PREM	E112477-11				
bis(2-Chloroethyl) ether (2-Chloroethyl	31		5.0	0.350	ug/l	1	PREM	E112477-11	38.7	44.2	18.4	Pass
bis(2-Chloroisopropyl) ether	ND<10	U	10	0.310	ug/l	1	PREM	E112477-11				
bis(2-Ethylhexyl) Phthalate	39		5.0	1.77	ug/l	1	PREM	E112477-11	44.1	55.6	24.2	Pass
di-n-Butyl Phthalate	ND<5.0	U	5.0	1.14	ug/l	1	PREM	E112477-11				
di-n-Octylphthalate	ND<5.0	U	5.0	0.500	ug/l	1	PREM	E112477-11				

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n-Nitrosodi-n-Propylamine	50		5.0	0.580	ug/l	1	PREM	E112477-11	49.6	57.0	23.0	Pass
n-Nitrosodiphenylamine	ND<5.0	U	5.0	0.640	ug/l	1	PREM	E112477-11				

Location Identifier: WT-AC-03-043

Sample Identifier 2001492 12/12/2001 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	40		2.0	0.750	mg/L	5	PREM	E112477-12	33.4	41.8	20	Pass

Location Identifier: WT-AC-03-044

Sample Identifier 2001493 12/12/2001 13:03 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	39		5.0	0.184	ug/l	1	PREM	E112477-13	35.6	43.0	27.1	Pass
1,1,2,2-Tetrachloroethane	98		5.0	0.243	ug/l	1	PREM	E112477-13	89.0	112	64.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E112477-13				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E112477-13				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E112477-13				
1,2-Dichloroethane	46		5.0	0.288	ug/l	1	PREM	E112477-13	44.7	54.8	35.7	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E112477-13				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E112477-13				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E112477-13				
Benzene	54		5.0	0.184	ug/l	1	PREM	E112477-13	50.0	59.6	40.8	Pass
Bromodichloromethane	28		5.0	0.172	ug/l	1	PREM	E112477-13	27.3	32.9	21.9	Pass
Bromoform	24		5.0	0.127	ug/l	1	PREM	E112477-13	25.6	32.0	19.2	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E112477-13				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E112477-13				
Carbon Tetrachloride	45		5.0	0.228	ug/l	1	PREM	E112477-13	40.7	52.1	30.6	Pass
Chlorobenzene	57		5.0	0.157	ug/l	1	PREM	E112477-13	54.7	64.5	43.7	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E112477-13				
Chloroform	76		5.0	0.226	ug/l	1	PREM	E112477-13	72.1	85.2	56.9	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E112477-13				
Dibromochloromethane	22		5.0	0.156	ug/l	1	PREM	E112477-13	22.6	27.4	17.4	Pass
Ethylbenzene	62		5.0	0.176	ug/l	1	PREM	E112477-13	58.1	69.8	44.9	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E112477-13				
Methyl Isobutyl ketone (4-Methyl-2-Penta	82		10	1.89	ug/l	1	PREM	E112477-13	80.9	107	49.8	Pass
Methylene Chloride	64		5.0	0.789	ug/l	1	PREM	E112477-13	58.6	73.3	44.3	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E112477-13				
Tetrachloroethylene (PCE)	30		5.0	0.171	ug/l	1	PREM	E112477-13	27.1	32.1	20.7	Pass

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Toluene	56		5.0	0.188	ug/l	1	PREM	E112477-13	53.0	61.4	42.8	Pass
Trichloroethylene (TCE)	40		5.0	0.220	ug/l	1	PREM	E112477-13	36.6	43.5	27.7	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E112477-13				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E112477-13				
m,p-Xylene (Sum of Isomers)	59		5.0	0.424	ug/l	1	PREM	E112477-13	54.2	67.5	37.8	Pass
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E112477-13				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E112477-13				

Location Identifier: WT-AC-03-045

Sample Identifier	2001525	12/17/2001	13:30	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.43	U	0.43	0.120	ug/l	1	PREM	E112639-15				
PCB-1221 (Arochlor 1221)	ND<0.43	U	0.43	0.120	ug/l	1	PREM	E112639-15				
PCB-1232 (Arochlor 1232)	ND<0.43	U	0.43	0.120	ug/l	1	PREM	E112639-15				
PCB-1242 (Arochlor 1242)	ND<0.43	U	0.43	0.120	ug/l	1	PREM	E112639-15				
PCB-1248 (Arochlor 1248)	ND<0.43	U	0.43	0.120	ug/l	1	PREM	E112639-15				
PCB-1254 (Arochlor 1254)	4.3		0.43	0.120	ug/l	1	PREM	E112639-15				
PCB-1260 (Arochlor 1260)	ND<0.43	U	0.43	0.120	ug/l	1	PREM	E112639-15				

Location Identifier: WT-AC-03-046

Sample Identifier	2001550	12/21/2001	13:35	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112877-20				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112877-20				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112877-20				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112877-20				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112877-20				
PCB-1254 (Arochlor 1254)	1.9		0.40	0.120	ug/l	1	PREM	E112877-20	2.04	2.69	1.04	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E112877-20				

Location Identifier: WT-AC-03-047

Sample Identifier	2001579	01/02/2002	15:05	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201032-17				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201032-17				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201032-17				

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PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201032-17				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201032-17				
PCB-1254 (Arochlor 1254)	3.6		0.41	0.120	ug/l	1	PREM	E201032-17	4.58	6.04	2.34	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201032-17				

Location Identifier: WT-AC-03-048

Sample Identifier 2001600 01/03/2002 13:35 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201085-21				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201085-21				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201085-21				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201085-21				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201085-21				
PCB-1254 (Arochlor 1254)	5.4		0.41	0.120	ug/l	1	PREM	E201085-21	6.11	8.06	3.13	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201085-21				

Location Identifier: WT-AC-03-049

Sample Identifier 2001610 01/04/2002 13:02 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201124-10				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201124-10				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201124-10				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201124-10				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201124-10				
PCB-1254 (Arochlor 1254)	2.4		0.41	0.120	ug/l	1	PREM	E201124-10	2.54	3.35	3.35	FAIL
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E201124-10				

Location Identifier: WT-AC-03-050

Sample Identifier 2001611 01/04/2002 13:12 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.21		0.010	0	mg/L	1	PREM	E201124-11	0.227	0.259	0.194	Pass
Barium	0.47		0.010	0.000680	mg/L	1	PREM	E201124-11	0.486	0.538	0.434	Pass
Cadmium	0.046		0.0020	0.000320	mg/L	1	PREM	E201124-11	0.0509	0.0568	0.0450	Pass
Chromium, Total	0.23		0.010	0.000740	mg/L	1	PREM	E201124-11	0.233	0.258	0.208	Pass
Copper	0.16		0.010	0.000870	mg/L	1	PREM	E201124-11	0.156	0.174	0.138	Pass
Lead	0.30		0.0040	0.00175	mg/L	1	PREM	E201124-11	0.313	0.352	0.275	Pass

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Mercury	0.0014	0.0002(0.000022 mg/L	1	PREM	E201124-11	0.00340	0.00425	0.00254	FAIL
Nickel	0.18	0.010 0.00108 mg/L	1	PREM	E201124-11	0.187	0.203	0.164	Pass
Selenium	0.27	0.010 0.00460 mg/L	1	PREM	E201124-11	0.277	0.318	0.236	Pass
Silver	0.37	0.0020 0.00627 mg/L	1	PREM	E201124-11	0.370	0.414	0.325	Pass
Zinc	0.099	J 0.010 0.00198 mg/L	1	PREM	E201124-11	0.137	0.154	0.120	FAIL

Location Identifier: WT-AC-03-051

Sample Identifier 2001612 01/04/2002 13:16 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.28		0.010		mg/L	1	PREM	E201124-12	0.312	0.396	0.216	Pass

Location Identifier: WT-AC-03-052

Sample Identifier 2001613 01/04/2002 13:18 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	34		5.4	0.330	ug/l	1	PREM	E201124-13	42.4	46.3	18.9	Pass
1,2-Dichlorobenzene	45		5.4	0.400	ug/l	1	PREM	E201124-13	60.3	63.3	10.7	Pass
1,3-Dichlorobenzene	ND<5.4	U	5.4	0.310	ug/l	1	PREM	E201124-13				
1,4-Dichlorobenzene	ND<5.4	U	5.4	0.300	ug/l	1	PREM	E201124-13				
2,4,5-Trichlorophenol	110		5.4	0.550	ug/l	1	PREM	E201124-13	138	155	71.4	Pass
2,4,6-Trichlorophenol	59		5.4	0.420	ug/l	1	PREM	E201124-13	71.0	81.9	35.6	Pass
2,4-Dichlorophenol	70		5.4	0.380	ug/l	1	PREM	E201124-13	89.8	96.3	45.2	Pass
2,4-Dimethylphenol	93		5.4	0.640	ug/l	1	PREM	E201124-13	127	143	50.7	Pass
2,4-Dinitrophenol	87		5.4	0.0700	ug/l	1	PREM	E201124-13	129	140	22.9	Pass
2,4-Dinitrotoluene	ND<5.4	U	5.4	0.600	ug/l	1	PREM	E201124-13				
2,6-Dinitrotoluene	71		5.4	0.530	ug/l	1	PREM	E201124-13	91.2	105	48.9	Pass
2-Chloronaphthalene	ND<5.4	U	5.4	0.510	ug/l	1	PREM	E201124-13				
2-Chlorophenol	67		5.4	0.400	ug/l	1	PREM	E201124-13	87.4	96.2	40.0	Pass
2-Methylnaphthalene	ND<5.4	U	5.4	0.430	ug/l	1	PREM	E201124-13				
2-Methylphenol (o-Cresol)	61		5.4	0.420	ug/l	1	PREM	E201124-13	90.5	98.6	30.3	Pass
2-Nitroaniline	ND<27	U	27	0.550	ug/l	1	PREM	E201124-13				
2-Nitrophenol	76		5.4	0.420	ug/l	1	PREM	E201124-13	94.4	108	44.3	Pass
3,3'-Dichlorobenzidine	ND<5.4	U	5.4	0.730	ug/l	1	PREM	E201124-13				
3-Nitroaniline	ND<27	U	27	0.440	ug/l	1	PREM	E201124-13				
4,6-Dinitro-2-Methylphenol	110		5.4		ug/l	1	PREM	E201124-13	140	171	47.7	Pass
4-Bromophenyl Phenyl ether	ND<5.4	U	5.4	0.530	ug/l	1	PREM	E201124-13				
4-Chloro-3-Methylphenol	61		5.4	0.440	ug/l	1	PREM	E201124-13	64.8	73.6	34.2	Pass
4-Chloroaniline	ND<11	U	11	0.410	ug/l	1	PREM	E201124-13				

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4-Chlorophenyl Phenyl ether	46		5.4	0.540	ug/l	1	PREM	E201124-13	57.0	64.3	32.7	Pass
4-Nitroaniline	ND<11	U	11	0.480	ug/l	1	PREM	E201124-13				
4-Nitrophenol	26		5.4	0.290	ug/l	1	PREM	E201124-13	56.2	65.3	0	Pass
Acenaphthene	ND<5.4	U	5.4	0.450	ug/l	1	PREM	E201124-13				
Acenaphthylene	50		5.4	0.470	ug/l	1	PREM	E201124-13	67.2	73.1	35.7	Pass
Anthracene	ND<5.4	U	5.4	0.560	ug/l	1	PREM	E201124-13				
Benzo(a)anthracene	28		5.4	0.420	ug/l	1	PREM	E201124-13	37.8	40.4	25.3	Pass
Benzo(a)pyrene	21		5.4	0.350	ug/l	1	PREM	E201124-13	30.3	34.4	10.1	Pass
Benzo(b)fluoranthene	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E201124-13				
Benzo(g,h,i)perylene	14		5.4	0.420	ug/l	1	PREM	E201124-13	20.2	25.4	4.96	Pass
Benzo(k)fluoranthene	16		5.4	0.360	ug/l	1	PREM	E201124-13	20.9	29.2	9.15	Pass
Benzyl Butyl Phthalate	38		5.4	0.460	ug/l	1	PREM	E201124-13	32.5	45.3	15.0	Pass
Carbazole	ND<5.4	U	5.4		ug/l	1	PREM	E201124-13				
Chrysene	50		5.4	0.440	ug/l	1	PREM	E201124-13	64.2	74.2	35.5	Pass
Cresol,m- & p-	ND<5.4	U	5.4	0.740	ug/l	1	PREM	E201124-13				
Dibenz(a,h)anthracene	ND<5.4	U	5.4	0.370	ug/l	1	PREM	E201124-13				
Dibenzofuran	ND<11	U	11	0.480	ug/l	1	PREM	E201124-13				
Diethyl Phthalate	67		5.4	0.660	ug/l	1	PREM	E201124-13	80.4	102	22.0	Pass
Dimethyl Phthalate	95		5.4	0.600	ug/l	1	PREM	E201124-13	136	168	5.97	Pass
Fluoranthene	49		5.4	0.480	ug/l	1	PREM	E201124-13	61.1	70.1	36.2	Pass
Fluorene	63		5.4	0.540	ug/l	1	PREM	E201124-13	79.0	90.2	44.6	Pass
Hexachlorobenzene	27		5.4	0.550	ug/l	1	PREM	E201124-13	39.4	45.5	22.8	Pass
Hexachlorobutadiene	62		5.4	0.320	ug/l	1	PREM	E201124-13	85.8	98.7	29.0	Pass
Hexachlorocyclopentadiene	ND<5.4	U	5.4	0.250	ug/l	1	PREM	E201124-13				
Hexachloroethane	25		5.4	0.270	ug/l	1	PREM	E201124-13	32.9	37.2	11.2	Pass
Indeno(1,2,3-c,d)pyrene	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E201124-13				
Isophorone	61		5.4	0.440	ug/l	1	PREM	E201124-13	64.7	75.1	34.2	Pass
Naphthalene	85		5.4	0.390	ug/l	1	PREM	E201124-13	122	137	51.6	Pass
Nitrobenzene	24		5.4	0.380	ug/l	1	PREM	E201124-13	25.9	29.5	14.1	Pass
Pentachlorophenol	63		5.4	0.380	ug/l	1	PREM	E201124-13	82.4	98.2	35.5	Pass
Phenanthrene	37		5.4	0.560	ug/l	1	PREM	E201124-13	44.7	50.5	28.7	Pass
Phenol	13		5.4	0.360	ug/l	1	PREM	E201124-13	29.6	34.1	0	Pass
Pyrene	42		5.4	0.390	ug/l	1	PREM	E201124-13	49.6	61.4	25.2	Pass
bis(2-Chloroethoxy) Methane	16		5.4	0.460	ug/l	1	PREM	E201124-13	18.6	21.1	9.82	Pass
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.4	U	5.4	0.350	ug/l	1	PREM	E201124-13				
bis(2-Chloroisopropyl) ether	76		11	0.310	ug/l	1	PREM	E201124-13	97.3	124	44.1	Pass
bis(2-Ethylhexyl) Phthalate	97		5.4	1.77	ug/l	1	PREM	E201124-13	116	145	44.4	Pass
di-n-Butyl Phthalate	25		5.4	1.14	ug/l	1	PREM	E201124-13	25.7	34.0	17.8	Pass
di-n-Octylphthalate	13		5.4	0.500	ug/l	1	PREM	E201124-13	14.5	21.2	10.1	Pass
n-Nitrosodi-n-Propylamine	98		5.4	0.580	ug/l	1	PREM	E201124-13	110	125	52.3	Pass

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n-Nitrosodiphenylamine ND<5.4 U 5.4 0.640 ug/l 1 PREM E201124-13

Location Identifier: WT-AC-03-053

Sample Identifier 2001614 01/04/2002 13:21 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	66		2.0	0.750	mg/L	5	PREM	E201124-14	75.8	94.8	45.5	Pass

Location Identifier: WT-AC-03-054

Sample Identifier 2001615 01/04/2002 13:25 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	43		5.0	0.184	ug/l	1	PREM	E201124-15	39.6	47.8	30.1	Pass
1,1,2,2-Tetrachloroethane	110		5.0	0.243	ug/l	1	PREM	E201124-15	107	135	77.3	Pass
1,1,2-Trichloroethane	140		5.0	0.175	ug/l	1	PREM	E201124-15	135	162	105	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E201124-15				
1,1-Dichloroethene	100		5.0	0.274	ug/l	1	PREM	E201124-15	85.6	116	61.2	Pass
1,2-Dichloroethane	31		5.0	0.288	ug/l	1	PREM	E201124-15	29.1	35.9	23.4	Pass
1,2-Dichloropropane	140		5.0	0.234	ug/l	1	PREM	E201124-15	131	154	101	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E201124-15				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E201124-15				
Benzene	50		5.0	0.184	ug/l	1	PREM	E201124-15	48.3	57.6	39.4	Pass
Bromodichloromethane	60		5.0	0.172	ug/l	1	PREM	E201124-15	59.1	71.0	47.8	Pass
Bromoform	56		5.0	0.127	ug/l	1	PREM	E201124-15	60.5	75.6	46.8	Pass
Bromomethane	18		5.0	0.167	ug/l	1	PREM	E201124-15	20.8	30.9	10.5	Pass
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E201124-15				
Carbon Tetrachloride	14		5.0	0.228	ug/l	1	PREM	E201124-15	12.6	16.2	9.70	Pass
Chlorobenzene	54		5.0	0.157	ug/l	1	PREM	E201124-15	51.6	60.8	41.3	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E201124-15				
Chloroform	29		5.0	0.226	ug/l	1	PREM	E201124-15	25.7	30.6	20.6	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E201124-15				
Dibromochloromethane	75		5.0	0.156	ug/l	1	PREM	E201124-15	73.6	89.6	56.9	Pass
Ethylbenzene	28		5.0	0.176	ug/l	1	PREM	E201124-15	26.1	31.2	20.3	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E201124-15				
Methyl Isobutyl ketone (4-Methyl-2-Penta	ND<10	U	10	1.89	ug/l	1	PREM	E201124-15				
Methylene Chloride	56		5.0	0.789	ug/l	1	PREM	E201124-15	45.7	57.4	34.6	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E201124-15				
Tetrachloroethylene (PCE)	26		5.0	0.171	ug/l	1	PREM	E201124-15	26.1	31.0	20.0	Pass
Toluene	12		5.0	0.188	ug/l	1	PREM	E201124-15	10.9	13.1	8.60	Pass

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Trichloroethylene (TCE)	41		5.0	0.220	ug/l	1	PREM	E201124-15	37.6	44.6	28.5	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E201124-15				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E201124-15				
m,p-Xylene (Sum of Isomers)	85		5.0	0.424	ug/l	1	PREM	E201124-15	80.7	98.4	56.5	Pass
o-Xylene (1,2-Dimethylbenzene)	49		5.0	0.171	ug/l	1	PREM	E201124-15				FALSE POSITIVE
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E201124-15				

Location Identifier: WT-AC-03-055

Sample Identifier 2001628 01/07/2002 13:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201171-13				
PCB-1221 (Arochlor 1221)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201171-13				
PCB-1232 (Arochlor 1232)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201171-13				
PCB-1242 (Arochlor 1242)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201171-13				
PCB-1248 (Arochlor 1248)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201171-13				
PCB-1254 (Arochlor 1254)	6.2		0.42	0.120	ug/l	1	PREM	E201171-13	7.33	9.68	3.75	Pass
PCB-1260 (Arochlor 1260)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201171-13				

Location Identifier: WT-AC-03-056

Sample Identifier 2001647 01/09/2002 11:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201296-10				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201296-10				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201296-10				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201296-10				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201296-10				
PCB-1254 (Arochlor 1254)	4.2		0.40	0.120	ug/l	1	PREM	E201296-10	4.27	5.64	2.19	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201296-10				

Location Identifier: WT-AC-03-057

Sample Identifier 2001648 01/09/2002 11:03 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.31		0.010	0	mg/L	1	PREM	E201296-11	0.322	0.369	0.276	Pass
Barium	0.42		0.010	0.000680	mg/L	1	PREM	E201296-11	0.389	0.430	0.347	Pass
Cadmium	0.096		0.0020	0.000320	mg/L	1	PREM	E201296-11	0.103	0.115	0.0912	Pass
Chromium, Total	0.18		0.010	0.000740	mg/L	1	PREM	E201296-11	0.178	0.197	0.158	Pass

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Copper	0.28	0.010	0.000870 mg/L	1	PREM	E201296-11	0.275	0.306	0.244	Pass
Lead	0.27	0.0040	0.00175 mg/L	1	PREM	E201296-11	0.271	0.305	0.238	Pass
Mercury	0.012	0.00020	0.000022 mg/L	1	PREM	E201296-11	0.0134	0.0168	0.0101	Pass
Nickel	0.66	0.010	0.00108 mg/L	1	PREM	E201296-11	0.661	0.731	0.590	Pass
Selenium	0.52	0.010	0.00460 mg/L	1	PREM	E201296-11	0.524	0.601	0.447	Pass
Silver	0.24	0.0020	0.00627 mg/L	1	PREM	E201296-11	0.238	0.267	0.210	Pass
Zinc	0.92	0.010	0.00198 mg/L	1	PREM	E201296-11	0.888	1.000	0.778	Pass

Location Identifier: WT-AC-03-058

Sample Identifier 2001649 01/09/2002 11:06 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.64		0.020		mg/L	2	PREM	E201296-12	0.690	0.872	0.478	Pass

Location Identifier: WT-AC-03-059

Sample Identifier 2001650 01/09/2002 11:09 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	19		5.4	0.330	ug/l	1	PREM	E201296-13	24.1	27.8	10.9	Pass
1,2-Dichlorobenzene	76		5.4	0.400	ug/l	1	PREM	E201296-13	92.4	97.0	32.3	Pass
1,3-Dichlorobenzene	ND<5.4	U	5.4	0.310	ug/l	1	PREM	E201296-13				
1,4-Dichlorobenzene	ND<5.4	U	5.4	0.300	ug/l	1	PREM	E201296-13				
2,4,5-Trichlorophenol	71		5.4	0.550	ug/l	1	PREM	E201296-13	75.6	85.0	42.2	Pass
2,4,6-Trichlorophenol	51		5.4	0.420	ug/l	1	PREM	E201296-13	53.5	61.5	27.2	Pass
2,4-Dichlorophenol	110		5.4	0.380	ug/l	1	PREM	E201296-13	118	126	59.1	Pass
2,4-Dimethylphenol	42		5.4	0.640	ug/l	1	PREM	E201296-13	51.3	58.6	18.8	Pass
2,4-Dinitrophenol	110		5.4	0.0700	ug/l	1	PREM	E201296-13	138	148	24.1	Pass
2,4-Dinitrotoluene	100		5.4	0.600	ug/l	1	PREM	E201296-13	105	124	59.2	Pass
2,6-Dinitrotoluene	ND<5.4	U	5.4	0.530	ug/l	1	PREM	E201296-13				
2-Chloronaphthalene	16		5.4	0.510	ug/l	1	PREM	E201296-13	18.5	22.9	9.85	Pass
2-Chlorophenol	52		5.4	0.400	ug/l	1	PREM	E201296-13	62.0	68.7	29.1	Pass
2-Methylnaphthalene	ND<5.4	U	5.4	0.430	ug/l	1	PREM	E201296-13				
2-Methylphenol (o-Cresol)	22		5.4	0.420	ug/l	1	PREM	E201296-13	28.9	33.0	12.2	Pass
2-Nitroaniline	ND<27	U	27	0.550	ug/l	1	PREM	E201296-13				
2-Nitrophenol	13		5.4	0.420	ug/l	1	PREM	E201296-13	14.9	16.3	7.67	Pass
3,3'-Dichlorobenzidine	ND<5.4	U	5.4	0.730	ug/l	1	PREM	E201296-13				
3-Nitroaniline	ND<27	U	27	0.440	ug/l	1	PREM	E201296-13				
4,6-Dinitro-2-Methylphenol	120		5.4		ug/l	1	PREM	E201296-13	144	177	48.7	Pass
4-Bromophenyl Phenyl ether	97		5.4	0.530	ug/l	1	PREM	E201296-13	98.3	112	56.3	Pass

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4-Chloro-3-Methylphenol	64		5.4	0.440	ug/l	1	PREM	E201296-13	66.4	75.4	35.1	Pass
4-Chloroaniline	ND<11	U	11	0.410	ug/l	1	PREM	E201296-13				
4-Chlorophenyl Phenyl ether	84		5.4	0.540	ug/l	1	PREM	E201296-13	86.9	97.6	46.5	Pass
4-Nitroaniline	ND<11	U	11	0.480	ug/l	1	PREM	E201296-13				
4-Nitrophenol	33		5.4	0.290	ug/l	1	PREM	E201296-13	64.6	73.9	0	Pass
Acenaphthene	ND<5.4	U	5.4	0.450	ug/l	1	PREM	E201296-13				
Acenaphthylene	15		5.4	0.470	ug/l	1	PREM	E201296-13	18.3	21.3	9.34	Pass
Anthracene	19		5.4	0.560	ug/l	1	PREM	E201296-13	20.6	23.3	11.2	Pass
Benzo(a)anthracene	20		5.4	0.420	ug/l	1	PREM	E201296-13	25.0	26.2	17.2	Pass
Benzo(a)pyrene	ND<5.4	U	5.4	0.350	ug/l	1	PREM	E201296-13				
Benzo(b)fluoranthene	12		5.4	0.400	ug/l	1	PREM	E201296-13	15.1	17.9	8.61	Pass
Benzo(g,h,i)perylene	ND<5.4	U	5.4	0.420	ug/l	1	PREM	E201296-13				
Benzo(k)fluoranthene	ND<5.4	U	5.4	0.360	ug/l	1	PREM	E201296-13				
Benzyl Butyl Phthalate	110		5.4	0.460	ug/l	1	PREM	E201296-13	111	123	45.1	Pass
Carbazole	ND<5.4	U	5.4		ug/l	1	PREM	E201296-13				
Chrysene	23		5.4	0.440	ug/l	1	PREM	E201296-13	25.3	28.8	16.0	Pass
Cresol,m- & p-	ND<5.4	U	5.4	0.740	ug/l	1	PREM	E201296-13				
Dibenz(a,h)anthracene	ND<5.4	U	5.4	0.370	ug/l	1	PREM	E201296-13				
Dibenzofuran	59		11	0.480	ug/l	1	PREM	E201296-13	64.9	70.1	34.9	Pass
Diethyl Phthalate	140		5.4	0.660	ug/l	1	PREM	E201296-13	142	169	51.5	Pass
Dimethyl Phthalate	13		5.4	0.600	ug/l	1	PREM	E201296-13	14.5	17.1	5.54	Pass
Fluoranthene	18		5.4	0.480	ug/l	1	PREM	E201296-13	19.8	22.7	13.6	Pass
Fluorene	36		5.4	0.540	ug/l	1	PREM	E201296-13	39.4	45.6	22.5	Pass
Hexachlorobenzene	ND<5.4	U	5.4	0.550	ug/l	1	PREM	E201296-13				
Hexachlorobutadiene	ND<5.4	U	5.4	0.320	ug/l	1	PREM	E201296-13				
Hexachlorocyclopentadiene	ND<5.4	U	5.4	0.250	ug/l	1	PREM	E201296-13				
Hexachloroethane	ND<5.4	U	5.4	0.270	ug/l	1	PREM	E201296-13				
Indeno(1,2,3-c,d)pyrene	13		5.4	0.400	ug/l	1	PREM	E201296-13	20.0	21.0	9.27	Pass
Isophorone	56		5.4	0.440	ug/l	1	PREM	E201296-13	58.1	67.3	31.0	Pass
Naphthalene	120		5.4	0.390	ug/l	1	PREM	E201296-13	139	156	58.2	Pass
Nitrobenzene	83		5.4	0.380	ug/l	1	PREM	E201296-13	98.0	112	48.1	Pass
Pentachlorophenol	75		5.4	0.380	ug/l	1	PREM	E201296-13	78.0	92.9	33.3	Pass
Phenanthrene	22		5.4	0.560	ug/l	1	PREM	E201296-13	24.4	27.3	14.5	Pass
Phenol	54		5.4	0.360	ug/l	1	PREM	E201296-13	134	145	29.7	Pass
Pyrene	28		5.4	0.390	ug/l	1	PREM	E201296-13	30.2	39.3	15.6	Pass
bis(2-Chloroethoxy) Methane	81		5.4	0.460	ug/l	1	PREM	E201296-13	118	124	62.2	Pass
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.4	U	5.4	0.350	ug/l	1	PREM	E201296-13				
bis(2-Chloroisopropyl) ether	ND<11	U	11	0.310	ug/l	1	PREM	E201296-13				
bis(2-Ethylhexyl) Phthalate	20		5.4	1.77	ug/l	1	PREM	E201296-13	20.9	26.6	14.1	Pass
di-n-Butyl Phthalate	ND<5.4	U	5.4	1.14	ug/l	1	PREM	E201296-13				

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di-n-Octylphthalate	61		5.4	0.500	ug/l	1	PREM	E201296-13	61.1	77.2	24.7	Pass
n-Nitrosodi-n-Propylamine	ND<5.4	U	5.4	0.580	ug/l	1	PREM	E201296-13				
n-Nitrosodiphenylamine	37		5.4	0.640	ug/l	1	PREM	E201296-13	49.7	80.1	21.0	Pass

Location Identifier: WT-AC-03-060

Sample Identifier 2001651 01/09/2002 11:12 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	56		2.0	0.750	mg/L	5	PREM	E201296-14	47.4	59.2	28.4	Pass

Location Identifier: WT-AC-03-061

Sample Identifier 2001652 01/09/2002 11:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	40		5.0	0.184	ug/l	1	PREM	E201296-15	39.6	47.8	30.1	Pass
1,1,2,2-Tetrachloroethane	160		5.0	0.243	ug/l	1	PREM	E201296-15	133	168	96.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E201296-15				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E201296-15				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E201296-15				
1,2-Dichloroethane	73		5.0	0.288	ug/l	1	PREM	E201296-15	73.8	90.0	58.7	Pass
1,2-Dichloropropane	68		5.0	0.234	ug/l	1	PREM	E201296-15	64.5	75.5	50.3	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E201296-15				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E201296-15				
Benzene	33		5.0	0.184	ug/l	1	PREM	E201296-15	30.1	36.1	24.4	Pass
Bromodichloromethane	58		5.0	0.172	ug/l	1	PREM	E201296-15	55.3	66.5	44.7	Pass
Bromoform	71		5.0	0.127	ug/l	1	PREM	E201296-15	66.4	82.9	51.5	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E201296-15				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E201296-15				
Carbon Tetrachloride	35		5.0	0.228	ug/l	1	PREM	E201296-15	33.9	43.4	25.5	Pass
Chlorobenzene	15		5.0	0.157	ug/l	1	PREM	E201296-15	14.4	16.9	12.0	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E201296-15				
Chloroform	15		5.0	0.226	ug/l	1	PREM	E201296-15	13.8	16.6	11.2	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E201296-15				
Dibromochloromethane	46		5.0	0.156	ug/l	1	PREM	E201296-15	43.5	52.9	33.6	Pass
Ethylbenzene	29		5.0	0.176	ug/l	1	PREM	E201296-15	27.1	32.4	21.1	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E201296-15				
Methyl Isobutyl ketone (4-Methyl-2-Penta	63		10	1.89	ug/l	1	PREM	E201296-15	59.8	75.9	35.1	Pass
Methylene Chloride	27		5.0	0.789	ug/l	1	PREM	E201296-15	27.6	35.2	21.1	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E201296-15				

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Tetrachloroethylene (PCE)	47		5.0	0.171	ug/l	1	PREM	E201296-15	50.3	59.3	38.5	Pass
Toluene	42		5.0	0.188	ug/l	1	PREM	E201296-15	40.2	46.7	32.4	Pass
Trichloroethylene (TCE)	24		5.0	0.220	ug/l	1	PREM	E201296-15	24.8	29.5	18.9	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E201296-15				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E201296-15				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E201296-15				
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E201296-15				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E201296-15				

Location Identifier: WT-AC-03-062

Sample Identifier 2001690 01/15/2002 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201509-17				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201509-17				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201509-17				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201509-17				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201509-17				
PCB-1254 (Arochlor 1254)	3.1		0.40	0.120	ug/l	1	PREM	E201509-17	2.90	3.83	1.48	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201509-17				

Location Identifier: WT-AC-03-063

Sample Identifier 2001707 01/16/2002 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.39	U	0.39	0.120	ug/l	1	PREM	E201566-8				
PCB-1221 (Arochlor 1221)	ND<0.39	U	0.39	0.120	ug/l	1	PREM	E201566-8				
PCB-1232 (Arochlor 1232)	ND<0.39	U	0.39	0.120	ug/l	1	PREM	E201566-8				
PCB-1242 (Arochlor 1242)	ND<0.39	U	0.39	0.120	ug/l	1	PREM	E201566-8				
PCB-1248 (Arochlor 1248)	ND<0.39	U	0.39	0.120	ug/l	1	PREM	E201566-8				
PCB-1254 (Arochlor 1254)	4.6		0.39	0.120	ug/l	1	PREM	E201566-8	5.32	7.02	2.72	Pass
PCB-1260 (Arochlor 1260)	ND<0.39	U	0.39	0.120	ug/l	1	PREM	E201566-8				

Location Identifier: WT-AC-03-064

Sample Identifier 2001708 01/16/2002 13:03 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.19		0.010	0	mg/L	1	PREM	E201566-9	.189	.224	.155	Pass
Barium	0.41		0.010	0.000680	mg/L	1	PREM	E201566-9	.405	.463	.351	Pass

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Cadmium	0.040	0.0020	0.000320 mg/L	1	PREM	E201566-9	.042	.049	.035	Pass
Chromium, Total	0.19	0.010	0.000740 mg/L	1	PREM	E201566-9	.194	.221	.167	Pass
Copper	0.14	0.010	0.000870 mg/L	1	PREM	E201566-9	.130	.146	.115	Pass
Lead	0.26	0.0040	0.00175 mg/L	1	PREM	E201566-9	.261	.298	.223	Pass
Mercury	0.0025	0.0002	0.000022 mg/L	1	PREM	E201566-9	.0028	.0035	.0021	Pass
Nickel	0.15	0.010	0.00108 mg/L	1	PREM	E201566-9	.153	.175	.132	Pass
Selenium	0.24	0.010	0.00460 mg/L	1	PREM	E201566-9	.231	.269	.180	Pass
Silver	0.30	0.0020	0.00627 mg/L	1	PREM	E201566-9	0.308	0.353	0.264	Pass
Zinc	0.14	0.010	0.00198 mg/L	1	PREM	E201566-9	.114	0.128	0.0998	FAIL

Location Identifier: WT-AC-03-065

Sample Identifier 2001709 01/16/2002 13:06 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.34		0.010		mg/L	1	PREM	E201566-10	0.374	0.475	0.259	Pass

Location Identifier: WT-AC-03-066

Sample Identifier 2001710 01/16/2002 13:09 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	71		4.9	0.330	ug/l	1	PREM	E201566-11	112	118	49.5	Pass
1,2-Dichlorobenzene	19		4.9	0.400	ug/l	1	PREM	E201566-11	30.8	33.3	0	Pass
1,3-Dichlorobenzene	ND<4.9	U	4.9	0.310	ug/l	1	PREM	E201566-11				
1,4-Dichlorobenzene	ND<4.9	U	4.9	0.300	ug/l	1	PREM	E201566-11				
2,4,5-Trichlorophenol	68		4.9	0.550	ug/l	1	PREM	E201566-11	83.8	94.2	46.0	Pass
2,4,6-Trichlorophenol	54		4.9	0.420	ug/l	1	PREM	E201566-11	76.1	87.8	38.1	Pass
2,4-Dichlorophenol	36		4.9	0.380	ug/l	1	PREM	E201566-11	49.0	53.9	25.0	Pass
2,4-Dimethylphenol	73		4.9	0.640	ug/l	1	PREM	E201566-11	113	128	44.8	Pass
2,4-Dinitrophenol	90		4.9	0.0700	ug/l	1	PREM	E201566-11	145	155	25.0	Pass
2,4-Dinitrotoluene	35		4.9	0.600	ug/l	1	PREM	E201566-11	48.2	55.6	24.5	Pass
2,6-Dinitrotoluene	68		4.9	0.530	ug/l	1	PREM	E201566-11	92.5	107	49.6	Pass
2-Chloronaphthalene	130		4.9	0.510	ug/l	1	PREM	E201566-11	177	186	92.6	Pass
2-Chlorophenol	110		4.9	0.400	ug/l	1	PREM	E201566-11	170	185	75.3	Pass
2-Methylnaphthalene	ND<4.9	U	4.9	0.430	ug/l	1	PREM	E201566-11				
2-Methylphenol (o-Cresol)	42		4.9	0.420	ug/l	1	PREM	E201566-11	71.4	92.3	17.1	Pass
2-Nitroaniline	ND<9.8	U	9.8	0.550	ug/l	1	PREM	E201566-11				
2-Nitrophenol	20		4.9	0.420	ug/l	1	PREM	E201566-11	29.4	33.0	14.4	Pass
3,3'-Dichlorobenzidine	ND<4.9	U	4.9	0.730	ug/l	1	PREM	E201566-11				
3-Nitroaniline	ND<9.8	U	9.8	0.440	ug/l	1	PREM	E201566-11				

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4,6-Dinitro-2-Methylphenol	52		4.9	ug/l	1	PREM	E201566-11	72.8	82.5	29.7	Pass	
4-Bromophenyl Phenyl ether	140		4.9	0.530	ug/l	1	PREM	E201566-11	177	201	99.4	Pass
4-Chloro-3-Methylphenol	ND<4.9	U	4.9	0.440	ug/l	1	PREM	E201566-11				
4-Chloroaniline	ND<9.8	U	9.8	0.410	ug/l	1	PREM	E201566-11				
4-Chlorophenyl Phenyl ether	ND<4.9	U	4.9	0.540	ug/l	1	PREM	E201566-11				
4-Nitroaniline	ND<9.8	U	9.8	0.480	ug/l	1	PREM	E201566-11				
4-Nitrophenol	21		4.9	0.290	ug/l	1	PREM	E201566-11	60.3	69.5	0	Pass
Acenaphthene	38		4.9	0.450	ug/l	1	PREM	E201566-11	55.6	62.8	29.8	Pass
Acenaphthylene	ND<4.9	U	4.9	0.470	ug/l	1	PREM	E201566-11				
Anthracene	75		4.9	0.560	ug/l	1	PREM	E201566-11	172	194	84.2	FAIL
Benzo(a)anthracene	ND<4.9	U	4.9	0.420	ug/l	1	PREM	E201566-11				
Benzo(a)pyrene	11		4.9	0.350	ug/l	1	PREM	E201566-11	24.7	28.2	11.6	FAIL
Benzo(b)fluoranthene	ND<4.9	U	4.9	0.400	ug/l	1	PREM	E201566-11				
Benzo(g,h,i)perylene	ND<4.9	U	4.9	0.420	ug/l	1	PREM	E201566-11				
Benzo(k)fluoranthene	9.0		4.9	0.360	ug/l	1	PREM	E201566-11	23.9	32.8	10.5	FAIL
Benzyl Butyl Phthalate	50		4.9	0.460	ug/l	1	PREM	E201566-11	65.9	87.2	15.3	Pass
Carbazole	ND<4.9	U	4.9	ug/l	1	PREM	E201566-11					
Chrysene	21		4.9	0.440	ug/l	1	PREM	E201566-11	46.4	53.5	26.6	FAIL
Cresol,m- & p-	ND<4.9	U	4.9	0.740	ug/l	1	PREM	E201566-11				
Dibenz(a,h)anthracene	ND<4.9	U	4.9	0.370	ug/l	1	PREM	E201566-11				
Dibenzofuran	50		9.8	0.480	ug/l	1	PREM	E201566-11	71.8	93.5	23.9	Pass
Diethyl Phthalate	ND<4.9	U	4.9	0.660	ug/l	1	PREM	E201566-11				
Dimethyl Phthalate	46		4.9	0.600	ug/l	1	PREM	E201566-11	61.4	78.0	14.9	Pass
Fluoranthene	8.7		4.9	0.480	ug/l	1	PREM	E201566-11	13.9	15.9	10.4	FAIL
Fluorene	29		4.9	0.540	ug/l	1	PREM	E201566-11	42.9	49.5	24.4	Pass
Hexachlorobenzene	16		4.9	0.550	ug/l	1	PREM	E201566-11	38.1	44.0	22.1	FAIL
Hexachlorobutadiene	ND<4.9	U	4.9	0.320	ug/l	1	PREM	E201566-11				
Hexachlorocyclopentadiene	ND<4.9	U	4.9	0.250	ug/l	1	PREM	E201566-11				
Hexachloroethane	40		4.9	0.270	ug/l	1	PREM	E201566-11	72.9	77.5	21.7	Pass
Indeno(1,2,3-c,d)pyrene	ND<4.9	U	4.9	0.400	ug/l	1	PREM	E201566-11				
Isophorone	43		4.9	0.440	ug/l	1	PREM	E201566-11	55.8	64.6	29.9	Pass
Naphthalene	60		4.9	0.390	ug/l	1	PREM	E201566-11	90.2	102	39.2	Pass
Nitrobenzene	50		4.9	0.380	ug/l	1	PREM	E201566-11	73.9	84.4	36.7	Pass
Pentachlorophenol	36		4.9	0.380	ug/l	1	PREM	E201566-11	57.8	68.6	23.3	Pass
Phenanthrene	57		4.9	0.560	ug/l	1	PREM	E201566-11	77.3	88.5	43.0	Pass
Phenol	7.4		4.9	0.360	ug/l	1	PREM	E201566-11	26.6	30.9	0	Pass
Pyrene	11		4.9	0.390	ug/l	1	PREM	E201566-11	19.0	26.5	10.0	Pass
bis(2-Chloroethoxy) Methane	ND<4.9	U	4.9	0.460	ug/l	1	PREM	E201566-11				
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<4.9	U	4.9	0.350	ug/l	1	PREM	E201566-11				
bis(2-Chloroisopropyl) ether	54		9.8	0.310	ug/l	1	PREM	E201566-11	131	151	32.3	Pass

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bis(2-Ethylhexyl) Phthalate	44		4.9	1.77	ug/l	1	PREM	E201566-11	98.2	123	39.4	Pass
di-n-Butyl Phthalate	ND<4.9	U	4.9	1.14	ug/l	1	PREM	E201566-11				
di-n-Octylphthalate	20		4.9	0.500	ug/l	1	PREM	E201566-11	44.6	57.4	19.5	Pass
n-Nitrosodi-n-Propylamine	ND<4.9	U	4.9	0.580	ug/l	1	PREM	E201566-11				
n-Nitrosodiphenylamine	29		4.9	0.640	ug/l	1	PREM	E201566-11	41.6	50.9	17.6	Pass

Location Identifier: WT-AC-03-067

Sample Identifier 2001711 01/16/2002 13:12 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	19		0.80	0.300	mg/L	2	PREM	E201566-12	56.9	71.1	34.1	FAIL

Location Identifier: WT-AC-03-068

Sample Identifier 2001712 01/16/2002 13:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	38		5.0	0.184	ug/l	1	PREM	E201566-13	34.7	41.9	26.4	Pass
1,1,2,2-Tetrachloroethane	ND<5.0	U	5.0	0.243	ug/l	1	PREM	E201566-13				
1,1,2-Trichloroethane	130		5.0	0.175	ug/l	1	PREM	E201566-13	129	154	101	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E201566-13				
1,1-Dichloroethene	13		5.0	0.274	ug/l	1	PREM	E201566-13	12.4	18.8	7.81	Pass
1,2-Dichloroethane	46		5.0	0.288	ug/l	1	PREM	E201566-13	44.7	54.8	35.7	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E201566-13				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E201566-13				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E201566-13				
Benzene	31		5.0	0.184	ug/l	1	PREM	E201566-13	29.3	35.1	23.8	Pass
Bromodichloromethane	63		5.0	0.172	ug/l	1	PREM	E201566-13	59.1	71.0	47.8	Pass
Bromoform	63		5.0	0.127	ug/l	1	PREM	E201566-13	55.9	69.8	43.2	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E201566-13				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E201566-13				
Carbon Tetrachloride	69		5.0	0.228	ug/l	1	PREM	E201566-13	61.1	78.1	45.8	Pass
Chlorobenzene	37		5.0	0.157	ug/l	1	PREM	E201566-13	35.1	41.3	28.3	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E201566-13				
Chloroform	50		5.0	0.226	ug/l	1	PREM	E201566-13	48.4	57.3	38.4	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E201566-13				
Dibromochloromethane	50		5.0	0.156	ug/l	1	PREM	E201566-13	46.0	56.0	35.5	Pass
Ethylbenzene	16		5.0	0.176	ug/l	1	PREM	E201566-13	15.0	17.9	11.8	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E201566-13				
Methyl Isobutyl ketone (4-Methyl-2-Penta	83		10	1.89	ug/l	1	PREM	E201566-13	83.1	111	52.5	Pass

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Methylene Chloride	31		5.0	0.789	ug/l	1	PREM	E201566-13	29.8	37.7	22.6	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E201566-13				
Tetrachloroethylene (PCE)	37		5.0	0.171	ug/l	1	PREM	E201566-13	36.2	42.8	27.7	Pass
Toluene	20		5.0	0.188	ug/l	1	PREM	E201566-13	19.3	22.7	15.4	Pass
Trichloroethylene (TCE)	37		5.0	0.220	ug/l	1	PREM	E201566-13	35.6	42.3	27.0	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E201566-13				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E201566-13				
m,p-Xylene (Sum of Isomers)	25		5.0	0.424	ug/l	1	PREM	E201566-13				FALSE POSITIVE
o-Xylene (1,2-Dimethylbenzene)	38		5.0	0.171	ug/l	1	PREM	E201566-13	37.2	46.1	26.0	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E201566-13				

Location Identifier: WT-AC-03-069

Sample Identifier 2001733 01/18/2002 13:25 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201691-15				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201691-15				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201691-15				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201691-15				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201691-15				
PCB-1254 (Arochlor 1254)	2.4		0.40	0.120	ug/l	1	PREM	E201691-15	2.42	3.19	1.24	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201691-15				

Location Identifier: WT-AC-03-070

Sample Identifier 2001734 01/18/2002 13:27 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.35		0.010	0	mg/L	1	PREM	E201691-16	0.351	0.402	0.300	Pass
Barium	0.90		0.010	0.000680	mg/L	1	PREM	E201691-16	0.838	0.928	0.748	Pass
Cadmium	0.46		0.0020	0.000320	mg/L	1	PREM	E201691-16	0.483	0.539	0.427	Pass
Chromium, Total	0.26		0.010	0.000740	mg/L	1	PREM	E201691-16	0.267	0.296	0.238	Pass
Copper	0.42		0.010	0.000870	mg/L	1	PREM	E201691-16	0.424	0.471	0.377	Pass
Lead	0.23		0.0040	0.00175	mg/L	1	PREM	E201691-16	0.229	0.257	0.201	Pass
Mercury	0.0023		0.00020	0.000022	mg/L	1	PREM	E201691-16	0.00243	0.00304	0.00182	Pass
Nickel	0.64		0.010	0.00108	mg/L	1	PREM	E201691-16	0.648	0.717	0.579	Pass
Selenium	0.51		0.010	0.00460	mg/L	1	PREM	E201691-16	0.513	0.589	0.437	Pass
Silver	0.23		0.0020	0.00627	mg/L	1	PREM	E201691-16	0.238	0.267	0.209	Pass
Zinc	0.34		0.010	0.00198	mg/L	1	PREM	E201691-16	0.332	0.373	0.291	Pass

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Location Identifier: WT-AC-03-071

Sample Identifier 2001735 01/18/2002 13:30 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.20		0.010		mg/L	1	PREM	E201691-17	0.214	0.281	0.142	Pass

Location Identifier: WT-AC-03-072

Sample Identifier 2001736 01/18/2002 13:33 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	64		4.8	0.330	ug/l	1	PREM	E201691-18	114	118	50.4	Pass
1,2-Dichlorobenzene	21		4.8	0.400	ug/l	1	PREM	E201691-18	37	40.8	0	Pass
1,3-Dichlorobenzene	ND<4.8	U	4.8	0.310	ug/l	1	PREM	E201691-18				
1,4-Dichlorobenzene	52		4.8	0.300	ug/l	1	PREM	E201691-18	98	107	0	Pass
2,4,5-Trichlorophenol	100		4.8	0.550	ug/l	1	PREM	E201691-18	147	165	75.6	Pass
2,4,6-Trichlorophenol	100		4.8	0.420	ug/l	1	PREM	E201691-18	152	176	74.6	Pass
2,4-Dichlorophenol	80		4.8	0.380	ug/l	1	PREM	E201691-18	112	119	56.2	Pass
2,4-Dimethylphenol	59		4.8	0.640	ug/l	1	PREM	E201691-18	92.2	104	36	Pass
2,4-Dinitrophenol	50		4.8	0.0700	ug/l	1	PREM	E201691-18	105	117	19.7	Pass
2,4-Dinitrotoluene	38		4.8	0.600	ug/l	1	PREM	E201691-18	57	66.2	29.9	Pass
2,6-Dinitrotoluene	ND<4.8	U	4.8	0.530	ug/l	1	PREM	E201691-18				
2-Chloronaphthalene	79		4.8	0.510	ug/l	1	PREM	E201691-18	124	139	48	Pass
2-Chlorophenol	90		4.8	0.400	ug/l	1	PREM	E201691-18	131	143	58.6	Pass
2-Methylnaphthalene	ND<4.8	U	4.8	0.430	ug/l	1	PREM	E201691-18				
2-Methylphenol (o-Cresol)	13		4.8	0.420	ug/l	1	PREM	E201691-18	20.5	23.4	0	Pass
2-Nitroaniline	ND<9.7	U	9.7	0.550	ug/l	1	PREM	E201691-18				
2-Nitrophenol	14		4.8	0.420	ug/l	1	PREM	E201691-18	21.3	23.7	10.6	Pass
3,3'-Dichlorobenzidine	ND<4.8	U	4.8	0.730	ug/l	1	PREM	E201691-18				
3-Nitroaniline	ND<9.7	U	9.7	0.440	ug/l	1	PREM	E201691-18				
4,6-Dinitro-2-Methylphenol	ND<4.8	U	4.8		ug/l	1	PREM	E201691-18				
4-Bromophenyl Phenyl ether	ND<4.8	U	4.8	0.530	ug/l	1	PREM	E201691-18				
4-Chloro-3-Methylphenol	42		4.8	0.440	ug/l	1	PREM	E201691-18	58.5	66.4	30.7	Pass
4-Chloroaniline	ND<9.7	U	9.7	0.410	ug/l	1	PREM	E201691-18				
4-Chlorophenyl Phenyl ether	62		4.8	0.540	ug/l	1	PREM	E201691-18	95.2	107	50.4	Pass
4-Nitroaniline	ND<9.7	U	9.7	0.480	ug/l	1	PREM	E201691-18				
4-Nitrophenol	30		4.8	0.290	ug/l	1	PREM	E201691-18	78.4	88.1	0	Pass
Acenaphthene	ND<4.8	U	4.8	0.450	ug/l	1	PREM	E201691-18				
Acenaphthylene	25		4.8	0.470	ug/l	1	PREM	E201691-18	39.8	44	20.9	Pass

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Anthracene	56		4.8	0.560	ug/l	1	PREM	E201691-18	91.1	104	47.2	Pass
Benzo(a)anthracene	26		4.8	0.420	ug/l	1	PREM	E201691-18	42.7	46	28.3	FAIL
Benzo(a)pyrene	ND<4.8	U	4.8	0.350	ug/l	1	PREM	E201691-18				
Benzo(b)fluoranthene	34		4.8	0.400	ug/l	1	PREM	E201691-18	57.6	70.1	27.2	Pass
Benzo(g,h,i)perylene	14		4.8	0.420	ug/l	1	PREM	E201691-18	22.8	28.8	0	Pass
Benzo(k)fluoranthene	ND<4.8	U	4.8	0.360	ug/l	1	PREM	E201691-18				
Benzyl Butyl Phthalate	ND<4.8	U	4.8	0.460	ug/l	1	PREM	E201691-18				
Carbazole	ND<4.8	U	4.8		ug/l	1	PREM	E201691-18				
Chrysene	41		4.8	0.440	ug/l	1	PREM	E201691-18	60.3	69.7	33.5	Pass
Cresol,m- & p-	ND<4.8	U	4.8	0.740	ug/l	1	PREM	E201691-18				
Dibenz(a,h)anthracene	19		4.8	0.370	ug/l	1	PREM	E201691-18	29.8	36.5	13.1	Pass
Dibenzofuran	93		9.7	0.480	ug/l	1	PREM	E201691-18	148	179	45.4	Pass
Diethyl Phthalate	57		4.8	0.660	ug/l	1	PREM	E201691-18	80.9	103	22	Pass
Dimethyl Phthalate	40		4.8	0.600	ug/l	1	PREM	E201691-18	58.6	74.6	15.3	Pass
Fluoranthene	ND<4.8	U	4.8	0.480	ug/l	1	PREM	E201691-18				
Fluorene	26		4.8	0.540	ug/l	1	PREM	E201691-18	42.2	48.7	24.1	Pass
Hexachlorobenzene	ND<4.8	U	4.8	0.550	ug/l	1	PREM	E201691-18				
Hexachlorobutadiene	83		4.8	0.320	ug/l	1	PREM	E201691-18	166	170	57.6	Pass
Hexachlorocyclopentadiene	ND<4.8	U	4.8	0.250	ug/l	1	PREM	E201691-18				
Hexachloroethane	ND<4.8	U	4.8	0.270	ug/l	1	PREM	E201691-18				
Indeno(1,2,3-c,d)pyrene	22		4.8	0.400	ug/l	1	PREM	E201691-18	37.8	43.3	14.2	Pass
Isophorone	99		4.8	0.440	ug/l	1	PREM	E201691-18	139	162	70	Pass
Naphthalene	91		4.8	0.390	ug/l	1	PREM	E201691-18	140	158	58.6	Pass
Nitrobenzene	37		4.8	0.380	ug/l	1	PREM	E201691-18	56.8	64.8	28.6	Pass
Pentachlorophenol	77		4.8	0.380	ug/l	1	PREM	E201691-18	128	153	58	Pass
Phenanthrene	35		4.8	0.560	ug/l	1	PREM	E201691-18	53.5	60.7	32.6	Pass
Phenol	15		4.8	0.360	ug/l	1	PREM	E201691-18	41.2	46.4	0	Pass
Pyrene	21		4.8	0.390	ug/l	1	PREM	E201691-18	35.4	45.2	18.2	Pass
bis(2-Chloroethoxy) Methane	23		4.8	0.460	ug/l	1	PREM	E201691-18	47.2	50.8	24.9	FAIL
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<4.8	U	4.8	0.350	ug/l	1	PREM	E201691-18				
bis(2-Chloroisopropyl) ether	13		9.7	0.310	ug/l	1	PREM	E201691-18	33.4	35	14	FAIL
bis(2-Ethylhexyl) Phthalate	79		4.8	1.77	ug/l	1	PREM	E201691-18	121	151	45.8	Pass
di-n-Butyl Phthalate	26		4.8	1.14	ug/l	1	PREM	E201691-18	37.6	47.8	20.7	Pass
di-n-Octylphthalate	ND<4.8	U	4.8	0.500	ug/l	1	PREM	E201691-18				
n-Nitrosodi-n-Propylamine	95		4.8	0.580	ug/l	1	PREM	E201691-18	131	149	62.4	Pass
n-Nitrosodiphenylamine	ND<4.8	U	4.8	0.640	ug/l	1	PREM	E201691-18				

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Location Identifier: WT-AC-03-073

Sample Identifier 2001737 01/18/2002 13:36 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	47		2.0	0.750	mg/L	5	PREM	E201691-19	41.0	51.2	24.6	Pass

Location Identifier: WT-AC-03-074

Sample Identifier 2001738 01/18/2002 13:40 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	41		5.0	0.184	ug/l	1	PREM	E201691-20	35.6	43.0	27.1	Pass
1,1,2,2-Tetrachloroethane	92		5.0	0.243	ug/l	1	PREM	E201691-20	89	112	64.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E201691-20				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E201691-20				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E201691-20				
1,2-Dichloroethane	48		5.0	0.288	ug/l	1	PREM	E201691-20	44.7	54.8	35.7	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E201691-20				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E201691-20				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E201691-20				
Benzene	54		5.0	0.184	ug/l	1	PREM	E201691-20	50.0	59.6	40.8	Pass
Bromodichloromethane	30		5.0	0.172	ug/l	1	PREM	E201691-20	27.3	32.9	21.9	Pass
Bromoform	28		5.0	0.127	ug/l	1	PREM	E201691-20	25.6	32.0	19.2	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E201691-20				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E201691-20				
Carbon Tetrachloride	48		5.0	0.228	ug/l	1	PREM	E201691-20	40.7	52.1	30.6	Pass
Chlorobenzene	57		5.0	0.157	ug/l	1	PREM	E201691-20	54.7	64.5	43.7	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E201691-20				
Chloroform	78		5.0	0.226	ug/l	1	PREM	E201691-20	72.1	85.2	56.9	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E201691-20				
Dibromochloromethane	24		5.0	0.156	ug/l	1	PREM	E201691-20	22.6	27.4	17.4	Pass
Ethylbenzene	62		5.0	0.176	ug/l	1	PREM	E201691-20	58.1	69.8	44.9	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E201691-20				
Methyl Isobutyl ketone (4-Methyl-2-Penta	83		10	1.89	ug/l	1	PREM	E201691-20	80.9	107	49.8	Pass
Methylene Chloride	63		5.0	0.789	ug/l	1	PREM	E201691-20	58.6	73.3	44.3	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E201691-20				
Tetrachloroethylene (PCE)	29		5.0	0.171	ug/l	1	PREM	E201691-20	27.1	32.1	20.7	Pass
Toluene	55		5.0	0.188	ug/l	1	PREM	E201691-20	53.0	61.4	42.8	Pass
Trichloroethylene (TCE)	40		5.0	0.220	ug/l	1	PREM	E201691-20	36.6	43.5	27.7	Pass

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Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E201691-20				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E201691-20				
m,p-Xylene (Sum of Isomers)	58		5.0	0.424	ug/l	1	PREM	E201691-20	54.2	67.5	37.8	Pass
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E201691-20				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E201691-20				

Location Identifier: WT-AC-03-075

Sample Identifier 2001750 01/22/2002 13:35 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201752-12				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201752-12				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201752-12				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201752-12				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201752-12				
PCB-1254 (Arochlor 1254)	6.1		0.40	0.120	ug/l	1	PREM	E201752-12	6.77	8.94	3.47	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201752-12				

Location Identifier: WT-AC-03-076

Sample Identifier 2001781 01/25/2002 13:35 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201956-21				
PCB-1221 (Arochlor 1221)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201956-21				
PCB-1232 (Arochlor 1232)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201956-21				
PCB-1242 (Arochlor 1242)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201956-21				
PCB-1248 (Arochlor 1248)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201956-21				
PCB-1254 (Arochlor 1254)	4.8		0.42	0.120	ug/l	1	PREM	E201956-21	5.29	6.98	2.71	Pass
PCB-1260 (Arochlor 1260)	ND<0.42	U	0.42	0.120	ug/l	1	PREM	E201956-21				

Location Identifier: WT-AC-03-077

Sample Identifier 2001782 01/25/2002 13:39 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.41		0.010	0	mg/L	1	PREM	E201956-22	.403	.461	.345	Pass
Barium	0.49		0.010	0.000680	mg/L	1	PREM	E201956-22	.486	.538	.434	Pass
Cadmium	0.12		0.0020	0.000320	mg/L	1	PREM	E201956-22	.129	.144	.114	Pass
Chromium, Total	0.22		0.010	0.000740	mg/L	1	PREM	E201956-22	.222	.246	.198	Pass
Copper	0.35		0.010	0.000870	mg/L	1	PREM	E201956-22	.344	.383	.305	Pass

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Lead	0.35	0.0040	0.00175	mg/L	1	PREM	E201956-22	.339	.381	.297	Pass
Mercury	0.015	0.0004	0.000044	mg/L	2	PREM	E201956-22	.0168	.0210	.0126	Pass
Nickel	0.84	0.010	0.00108	mg/L	1	PREM	E201956-22	.826	.914	.738	Pass
Selenium	0.66	0.010	0.00460	mg/L	1	PREM	E201956-22	.655	.751	.559	Pass
Silver	0.30	0.0020	0.00627	mg/L	1	PREM	E201956-22	.298	.334	.262	Pass
Zinc	1.1	0.010	0.00198	mg/L	1	PREM	E201956-22	1.110	1.250	.972	Pass

Location Identifier: WT-AC-03-078

Sample Identifier 2001783 01/25/2002 13:41 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.76		0.020		mg/L	2	PREM	E201956-23	.862	1.09	.597	Pass

Location Identifier: WT-AC-03-079

Sample Identifier 2001784 01/25/2002 13:43 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	13		5.2	0.330	ug/l	1	PREM	E201956-24	24.1	27.8	10.9	Pass
1,2-Dichlorobenzene	48		5.2	0.400	ug/l	1	PREM	E201956-24	92.4	97	32.3	Pass
1,3-Dichlorobenzene	ND<5.2	U	5.2	0.310	ug/l	1	PREM	E201956-24				
1,4-Dichlorobenzene	ND<5.2	U	5.2	0.300	ug/l	1	PREM	E201956-24				
2,4,5-Trichlorophenol	48		5.2	0.550	ug/l	1	PREM	E201956-24	75.6	85	42.2	Pass
2,4,6-Trichlorophenol	35		5.2	0.420	ug/l	1	PREM	E201956-24	53.5	61.5	27.2	Pass
2,4-Dichlorophenol	71		5.2	0.380	ug/l	1	PREM	E201956-24	118	126	59.1	Pass
2,4-Dimethylphenol	30		5.2	0.640	ug/l	1	PREM	E201956-24	51.3	58.6	18.8	Pass
2,4-Dinitrophenol	89		5.2	0.0700	ug/l	1	PREM	E201956-24	138	148	24.1	Pass
2,4-Dinitrotoluene	68		5.2	0.600	ug/l	1	PREM	E201956-24	105	124	59.2	Pass
2,6-Dinitrotoluene	ND<5.2	U	5.2	0.530	ug/l	1	PREM	E201956-24				
2-Chloronaphthalene	11		5.2	0.510	ug/l	1	PREM	E201956-24	18.5	22.9	9.85	Pass
2-Chlorophenol	35		5.2	0.400	ug/l	1	PREM	E201956-24	62.0	68.7	29.1	Pass
2-Methylnaphthalene	ND<5.2	U	5.2	0.430	ug/l	1	PREM	E201956-24				
2-Methylphenol (o-Cresol)	16		5.2	0.420	ug/l	1	PREM	E201956-24	28.9	33	12.2	Pass
2-Nitroaniline	ND<10	U	10	0.550	ug/l	1	PREM	E201956-24				
2-Nitrophenol	8.4		5.2	0.420	ug/l	1	PREM	E201956-24	14.9	16.3	7.67	Pass
3,3'-Dichlorobenzidine	ND<5.2	U	5.2	0.730	ug/l	1	PREM	E201956-24				
3-Nitroaniline	ND<10	U	10	0.440	ug/l	1	PREM	E201956-24				
4,6-Dinitro-2-Methylphenol	110		5.2	0.300	ug/l	1	PREM	E201956-24	144	177	48.7	Pass
4-Bromophenyl Phenyl ether	63		5.2	0.530	ug/l	1	PREM	E201956-24	98.3	112	56.3	Pass
4-Chloro-3-Methylphenol	38		5.2	0.440	ug/l	1	PREM	E201956-24	66.4	75.4	35.1	Pass

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4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E201956-24				
4-Chlorophenyl Phenyl ether	54		5.2	0.540	ug/l	1	PREM	E201956-24	86.9	97.6	46.5	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E201956-24				
4-Nitrophenol	22		5.2	0.290	ug/l	1	PREM	E201956-24	64.6	73.9	0	Pass
Acenaphthene	ND<5.2	U	5.2	0.450	ug/l	1	PREM	E201956-24				
Acenaphthylene	11		5.2	0.470	ug/l	1	PREM	E201956-24	18.3	21.3	9.34	Pass
Anthracene	14		5.2	0.560	ug/l	1	PREM	E201956-24	20.6	23.3	11.2	Pass
Benzo(a)anthracene	16		5.2	0.420	ug/l	1	PREM	E201956-24	25.0	26.2	17.2	FAIL
Benzo(a)pyrene	ND<5.2	U	5.2	0.350	ug/l	1	PREM	E201956-24				
Benzo(b)fluoranthene	8.8		5.2	0.400	ug/l	1	PREM	E201956-24	15.1	17.9	8.61	Pass
Benzo(g,h,i)perylene	ND<5.2	U	5.2	0.420	ug/l	1	PREM	E201956-24				
Benzo(k)fluoranthene	ND<5.2	U	5.2	0.360	ug/l	1	PREM	E201956-24				
Benzyl Butyl Phthalate	78		5.2	0.460	ug/l	1	PREM	E201956-24	111	123	45.1	Pass
Carbazole	ND<5.2	U	5.2	0.400	ug/l	1	PREM	E201956-24				
Chrysene	17		5.2	0.440	ug/l	1	PREM	E201956-24	25.3	28.8	16	Pass
Cresol,m- & p-	ND<5.2	U	5.2	0.740	ug/l	1	PREM	E201956-24				
Dibenz(a,h)anthracene	ND<5.2	U	5.2	0.370	ug/l	1	PREM	E201956-24				
Dibenzofuran	40		10	0.480	ug/l	1	PREM	E201956-24	64.9	70.1	34.9	Pass
Diethyl Phthalate	94		5.2	0.660	ug/l	1	PREM	E201956-24	142	169	51.5	Pass
Dimethyl Phthalate	9.4		5.2	0.600	ug/l	1	PREM	E201956-24	14.5	17.1	5.54	Pass
Fluoranthene	14		5.2	0.480	ug/l	1	PREM	E201956-24	19.8	22.7	13.6	Pass
Fluorene	24		5.2	0.540	ug/l	1	PREM	E201956-24	39.4	45.6	22.5	Pass
Hexachlorobenzene	ND<5.2	U	5.2	0.550	ug/l	1	PREM	E201956-24				
Hexachlorobutadiene	ND<5.2	U	5.2	0.320	ug/l	1	PREM	E201956-24				
Hexachlorocyclopentadiene	ND<5.2	U	5.2	0.250	ug/l	1	PREM	E201956-24				
Hexachloroethane	ND<5.2	U	5.2	0.270	ug/l	1	PREM	E201956-24				
Indeno(1,2,3-c,d)pyrene	10		5.2	0.400	ug/l	1	PREM	E201956-24	20	21	9.27	Pass
Isophorone	37		5.2	0.440	ug/l	1	PREM	E201956-24	58.1	67.3	31	Pass
Naphthalene	75		5.2	0.390	ug/l	1	PREM	E201956-24	139	156	58.2	Pass
Nitrobenzene	53		5.2	0.380	ug/l	1	PREM	E201956-24	98	112	48.1	Pass
Pentachlorophenol	58		5.2	0.380	ug/l	1	PREM	E201956-24	78	92.9	33.3	Pass
Phenanthrene	16		5.2	0.560	ug/l	1	PREM	E201956-24	24.4	27.3	14.5	Pass
Phenol	32		5.2	0.360	ug/l	1	PREM	E201956-24	134	145	29.7	Pass
Pyrene	22		5.2	0.390	ug/l	1	PREM	E201956-24	30.2	39.3	15.6	Pass
bis(2-Chloroethoxy) Methane	52		5.2	0.460	ug/l	1	PREM	E201956-24	118	124	62.2	FAIL
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.2	U	5.2	0.350	ug/l	1	PREM	E201956-24				
bis(2-Chloroisopropyl) ether	ND<10	U	10	0.310	ug/l	1	PREM	E201956-24				
bis(2-Ethylhexyl) Phthalate	15		5.2	1.77	ug/l	1	PREM	E201956-24	20.9	26.6	14.1	Pass
di-n-Butyl Phthalate	ND<5.2	U	5.2	1.14	ug/l	1	PREM	E201956-24				
di-n-Octylphthalate	44		5.2	0.500	ug/l	1	PREM	E201956-24	61.1	77.2	24.7	Pass

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n-Nitrosodi-n-Propylamine	ND<5.2	U	5.2	0.580	ug/l	1	PREM	E201956-24				
n-Nitrosodiphenylamine	25		5.2	0.640	ug/l	1	PREM	E201956-24	49.7	60.1	21	Pass

Location Identifier: WT-AC-03-08

Sample Identifier 2001814 01/30/2002 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A96-11				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A96-11				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A96-11				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A96-11				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A96-11				
PCB-1254 (Arochlor 1254)	6.3		0.40	0.120	ug/l	1	PREM	E201A96-11	7.63	10.1	3.91	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A96-11				

Location Identifier: WT-AC-03-080

Sample Identifier 2001785 01/25/2002 13:45 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	120		4.1	1.50	mg/L	10	PREM	E201956-25	94.7	118	56.8	FAIL

Location Identifier: WT-AC-03-081

Sample Identifier 2001786 01/25/2002 13:48 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	72		5.0	0.184	ug/l	1	PREM	E201956-26	65.4	79	49.5	Pass
1,1,2,2-Tetrachloroethane	37		5.0	0.243	ug/l	1	PREM	E201956-26	34.6	43.7	24.6	Pass
1,1,2-Trichloroethane	77		5.0	0.175	ug/l	1	PREM	E201956-26	74.4	89	58.4	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E201956-26				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E201956-26				
1,2-Dichloroethane	29		5.0	0.288	ug/l	1	PREM	E201956-26	26.8	33.2	21.6	Pass
1,2-Dichloropropane	100		5.0	0.234	ug/l	1	PREM	E201956-26	101	118	78.1	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E201956-26				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E201956-26				
Benzene	8.7		5.0	0.184	ug/l	1	PREM	E201956-26	7.93	9.82	6.22	Pass
Bromodichloromethane	22		5.0	0.172	ug/l	1	PREM	E201956-26	19.7	23.8	15.8	Pass
Bromoform	46		5.0	0.127	ug/l	1	PREM	E201956-26	39.6	49.5	30.3	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E201956-26				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E201956-26				

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Carbon Tetrachloride	60		5.0	0.228	ug/l	1	PREM	E201956-26	55.3	70.7	41.5	Pass
Chlorobenzene	25		5.0	0.157	ug/l	1	PREM	E201956-26	24.8	29.2	20.2	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E201956-26				
Chloroform	42		5.0	0.226	ug/l	1	PREM	E201956-26	38.5	45.7	30.6	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E201956-26				
Dibromochloromethane	17		5.0	0.156	ug/l	1	PREM	E201956-26	15.1	18.3	11.6	Pass
Ethylbenzene	72		5.0	0.176	ug/l	1	PREM	E201956-26	70.2	84.4	54.2	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E201956-26				
Methyl Isobutyl ketone (4-Methyl-2-Penta	76		10	1.89	ug/l	1	PREM	E201956-26	73.1	99.3	44.9	Pass
Methylene Chloride	38		5.0	0.789	ug/l	1	PREM	E201956-26	34.7	43.8	26.3	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E201956-26				
Tetrachloroethylene (PCE)	66		5.0	0.171	ug/l	1	PREM	E201956-26	70.4	82.7	53.8	Pass
Toluene	31		5.0	0.188	ug/l	1	PREM	E201956-26	30.5	35.6	24.5	Pass
Trichloroethylene (TCE)	37		5.0	0.220	ug/l	1	PREM	E201956-26	34.6	41.1	26.2	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E201956-26				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E201956-26				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E201956-26				
o-Xylene (1,2-Dimethylbenzene)	38		5.0	0.171	ug/l	1	PREM	E201956-26	38.2	48.3	26.6	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E201956-26				

Location Identifier: WT-AC-03-082

Sample Identifier		01/29/2002	13:05	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A46-12				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A46-12				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A46-12				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A46-12				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A46-12				
PCB-1254 (Arochlor 1254)	6.1		0.40	0.120	ug/l	1	PREM	E201A46-12	7.53	9.94	3.86	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E201A46-12				

Location Identifier: WT-AC-03-084

Sample Identifier		01/29/2002	13:13	Performance Evaluation - Water								
Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.24		0.010		mg/L	1	PREM	E201A46-14	0.250	.317	.173	Pass

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Location Identifier: WT-AC-03-085

Sample Identifier 2001801 01/29/2002 13:16 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	110		5.5	0.330	ug/l	1	PREM	E201A46-15	150	155	66.2	Pass
1,2-Dichlorobenzene	19		5.5	0.400	ug/l	1	PREM	E201A46-15	27.2	30.4	6.64	Pass
1,3-Dichlorobenzene	38		5.5	0.310	ug/l	1	PREM	E201A46-15	58.9	64.8	15.1	Pass
1,4-Dichlorobenzene	ND<5.5	U	5.5	0.300	ug/l	1	PREM	E201A46-15				
2,4,5-Trichlorophenol	90		5.5	0.550	ug/l	1	PREM	E201A46-15	112	126	59.2	Pass
2,4,6-Trichlorophenol	120		5.5	0.420	ug/l	1	PREM	E201A46-15	146	169	71.7	Pass
2,4-Dichlorophenol	140		5.5	0.380	ug/l	1	PREM	E201A46-15	189	199	94.3	Pass
2,4-Dimethylphenol	90		5.5	0.640	ug/l	1	PREM	E201A46-15	123	139	49.0	Pass
2,4-Dinitrophenol	93		5.5	0.0700	ug/l	1	PREM	E201A46-15	184	191	30.1	Pass
2,4-Dinitrotoluene	45		5.5	0.600	ug/l	1	PREM	E201A46-15	55.4	64.2	28.9	Pass
2,6-Dinitrotoluene	130		5.5	0.530	ug/l	1	PREM	E201A46-15	165	193	89.1	Pass
2-Chloronaphthalene	ND<5.5	U	5.5	0.510	ug/l	1	PREM	E201A46-15				
2-Chlorophenol	61		5.5	0.400	ug/l	1	PREM	E201A46-15	87.2	96.0	39.9	Pass
2-Methylnaphthalene	ND<5.5	U	5.5	0.430	ug/l	1	PREM	E201A46-15				
2-Methylphenol (o-Cresol)	18		5.5	0.420	ug/l	1	PREM	E201A46-15	30.4	36.5	10.5	Pass
2-Nitroaniline	ND<11	U	11	0.550	ug/l	1	PREM	E201A46-15				
2-Nitrophenol	21		5.5	0.420	ug/l	1	PREM	E201A46-15	28.7	32.2	14.0	Pass
3,3'-Dichlorobenzidine	ND<5.5	U	5.5	0.730	ug/l	1	PREM	E201A46-15				
3-Nitroaniline	ND<11	U	11	0.440	ug/l	1	PREM	E201A46-15				
4,6-Dinitro-2-Methylphenol	49		5.5	0.300	ug/l	1	PREM	E201A46-15	60.2	65.9	26.3	Pass
4-Bromophenyl Phenyl ether	110		5.5	0.530	ug/l	1	PREM	E201A46-15	133	151	75.3	Pass
4-Chloro-3-Methylphenol	110		5.5	0.440	ug/l	1	PREM	E201A46-15	158	180	85.7	Pass
4-Chloroaniline	ND<11	U	11	0.410	ug/l	1	PREM	E201A46-15				
4-Chlorophenyl Phenyl ether	80		5.5	0.540	ug/l	1	PREM	E201A46-15	101	113	53.1	Pass
4-Nitroaniline	ND<11	U	11	0.480	ug/l	1	PREM	E201A46-15				
4-Nitrophenol	ND<5.5	U	5.5	0.290	ug/l	1	PREM	E201A46-15				
Acenaphthene	62		5.5	0.450	ug/l	1	PREM	E201A46-15	83.3	93.9	43.9	Pass
Acenaphthylene	14		5.5	0.470	ug/l	1	PREM	E201A46-15	19.0	22.0	9.72	Pass
Anthracene	40		5.5	0.560	ug/l	1	PREM	E201A46-15	49.8	57.2	28.4	Pass
Benzo(a)anthracene	32		5.5	0.420	ug/l	1	PREM	E201A46-15	37.0	39.5	24.8	Pass
Benzo(a)pyrene	14		5.5	0.350	ug/l	1	PREM	E201A46-15	20.0	22.9	9.42	Pass
Benzo(b)fluoranthene	32		5.5	0.400	ug/l	1	PREM	E201A46-15	41.4	49.8	21.3	Pass
Benzo(g,h,i)perylene	ND<5.5	U	5.5	0.420	ug/l	1	PREM	E201A46-15				
Benzo(k)fluoranthene	31		5.5	0.360	ug/l	1	PREM	E201A46-15	38.3	50.5	17.0	Pass

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Benzyl Butyl Phthalate	48		5.5	0.460	ug/l	1	PREM	E201A46-15	56.6	68.5	21.5	Pass
Carbazole	ND<5.5	U	5.5	0.400	ug/l	1	PREM	E201A46-15				
Chrysene	38		5.5	0.440	ug/l	1	PREM	E201A46-15	48.6	56.0	27.7	Pass
Cresol,m- & p-	ND<5.5	U	5.5	0.740	ug/l	1	PREM	E201A46-15				
Dibenz(a,h)anthracene	15		5.5	0.370	ug/l	1	PREM	E201A46-15	18.4	21.7	0	Pass
Dibenzofuran	33		11	0.480	ug/l	1	PREM	E201A46-15	43.8	49.9	21.7	Pass
Diethyl Phthalate	ND<5.5	U	5.5	0.660	ug/l	1	PREM	E201A46-15				
Dimethyl Phthalate	52		5.5	0.600	ug/l	1	PREM	E201A46-15	63.4	80.4	14.7	Pass
Fluoranthene	29		5.5	0.480	ug/l	1	PREM	E201A46-15	36.4	41.8	22.7	Pass
Fluorene	ND<5.5	U	5.5	0.540	ug/l	1	PREM	E201A46-15				
Hexachlorobenzene	56		5.5	0.550	ug/l	1	PREM	E201A46-15	70.0	80.5	40.6	Pass
Hexachlorobutadiene	ND<5.5	U	5.5	0.320	ug/l	1	PREM	E201A46-15				
Hexachlorocyclopentadiene	110		5.5	0.250	ug/l	1	PREM	E201A46-15	155	161	19.0	Pass
Hexachloroethane	ND<5.5	U	5.5	0.270	ug/l	1	PREM	E201A46-15				
Indeno(1,2,3-c,d)pyrene	ND<5.5	U	5.5	0.400	ug/l	1	PREM	E201A46-15				
Isophorone	ND<5.5	U	5.5	0.440	ug/l	1	PREM	E201A46-15				
Naphthalene	93		5.5	0.390	ug/l	1	PREM	E201A46-15	133	150	55.9	Pass
Nitrobenzene	25		5.5	0.380	ug/l	1	PREM	E201A46-15	36.7	41.8	19.2	Pass
Pentachlorophenol	59		5.5	0.380	ug/l	1	PREM	E201A46-15	67.4	80.1	28.1	Pass
Phenanthrene	77		5.5	0.560	ug/l	1	PREM	E201A46-15	96.1	110	51.2	Pass
Phenol	16		5.5	0.360	ug/l	1	PREM	E201A46-15	63.4	70.0	0	Pass
Pyrene	30		5.5	0.390	ug/l	1	PREM	E201A46-15	38.2	48.4	19.6	Pass
bis(2-Chloroethoxy) Methane	ND<5.5	U	5.5	0.460	ug/l	1	PREM	E201A46-15				
bis(2-Chloroethyl) ether (2-Chloroethyl	22		5.5	0.350	ug/l	1	PREM	E201A46-15	38.7	44.4	18.4	Pass
bis(2-Chloroisopropyl) ether	ND<11	U	11	0.310	ug/l	1	PREM	E201A46-15				
bis(2-Ethylhexyl) Phthalate	39		5.5	1.77	ug/l	1	PREM	E201A46-15	44.1	55.6	24.2	Pass
di-n-Butyl Phthalate	ND<5.5	U	5.5	1.14	ug/l	1	PREM	E201A46-15				
di-n-Octylphthalate	ND<5.5	U	5.5	0.500	ug/l	1	PREM	E201A46-15				
n-Nitrosodi-n-Propylamine	32		5.5	0.580	ug/l	1	PREM	E201A46-15	49.6	57.0	23.0	Pass
n-Nitrosodiphenylamine	ND<5.5	U	5.5	0.640	ug/l	1	PREM	E201A46-15				

Location Identifier: WT-AC-03-086

Sample Identifier 2001802 01/29/2002 13:18 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	47		5.0	0.184	ug/l	1	PREM	E201A46-16	39.6	47.8	30.1	Pass
1,1,2,2-Tetrachloroethane	110		5.0	0.243	ug/l	1	PREM	E201A46-16	107	135	77.3	Pass
1,1,2-Trichloroethane	140		5.0	0.175	ug/l	1	PREM	E201A46-16	135	162	105	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E201A46-16				

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1,1-Dichloroethene	99		5.0	0.274	ug/l	1	PREM	E201A46-16	85.6	116	61.2	Pass
1,2-Dichloroethane	33		5.0	0.288	ug/l	1	PREM	E201A46-16	29.1	35.9	23.4	Pass
1,2-Dichloropropane	140		5.0	0.234	ug/l	1	PREM	E201A46-16	131	154	101	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E201A46-16				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E201A46-16				
Benzene	53		5.0	0.184	ug/l	1	PREM	E201A46-16	48.3	57.6	39.4	Pass
Bromodichloromethane	69		5.0	0.172	ug/l	1	PREM	E201A46-16	59.1	71.0	47.8	Pass
Bromoform	72		5.0	0.127	ug/l	1	PREM	E201A46-16	60.5	75.6	46.8	Pass
Bromomethane	23		5.0	0.167	ug/l	1	PREM	E201A46-16	20.8	30.9	10.5	Pass
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E201A46-16				
Carbon Tetrachloride	15		5.0	0.228	ug/l	1	PREM	E201A46-16	12.6	16.2	9.70	Pass
Chlorobenzene	54		5.0	0.157	ug/l	1	PREM	E201A46-16	51.6	60.8	41.3	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E201A46-16				
Chloroform	29		5.0	0.226	ug/l	1	PREM	E201A46-16	25.7	30.6	20.6	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E201A46-16				
Dibromochloromethane	81		5.0	0.156	ug/l	1	PREM	E201A46-16	73.6	89.6	56.9	Pass
Ethylbenzene	28		5.0	0.176	ug/l	1	PREM	E201A46-16	26.1	31.2	20.3	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E201A46-16				
Methyl Isobutyl ketone (4-Methyl-2-Penta	ND<10	U	10	1.89	ug/l	1	PREM	E201A46-16				
Methylene Chloride	51		5.0	0.789	ug/l	1	PREM	E201A46-16	45.7	57.4	34.6	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E201A46-16				
Tetrachloroethylene (PCE)	27		5.0	0.171	ug/l	1	PREM	E201A46-16	26.1	31.0	20.0	Pass
Toluene	12		5.0	0.188	ug/l	1	PREM	E201A46-16	10.9	13.1	8.60	Pass
Trichloroethylene (TCE)	42		5.0	0.220	ug/l	1	PREM	E201A46-16	37.6	44.6	28.5	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E201A46-16				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E201A46-16				
m,p-Xylene (Sum of Isomers)	87		5.0	0.424	ug/l	1	PREM	E201A46-16	80.7	98.9	56.5	Pass
o-Xylene (1,2-Dimethylbenzene)	50		5.0	0.171	ug/l	1	PREM	E201A46-16	46.7	57.0	32.7	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E201A46-16				

Location Identifier: WT-AC-03-087

Sample Identifier 2001803 01/29/2002 13:21 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	30		0.81	0.300	mg/L	2	PREM	E201A46-17	50.5	63.1	30.0	

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Location Identifier: WT-AC-03-089

Sample Identifier 2001829 02/05/2002 13:25 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202132-15				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202132-15				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202132-15				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202132-15				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202132-15				
PCB-1254 (Arochlor 1254)	2.0		0.40	0.120	ug/l	1	PREM	E202132-15	2.04	2.69	1.04	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202132-15				

Location Identifier: WT-AC-03-090

Sample Identifier 2001844 02/07/2002 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202232-10				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202232-10				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202232-10				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202232-10				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202232-10				
PCB-1254 (Arochlor 1254)	6.6		0.40	0.120	ug/l	1	PREM	E202232-10	7.22	9.53	3.70	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202232-10				

Location Identifier: WT-AC-03-091

Sample Identifier 2001861 02/11/2002 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202350-17				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202350-17				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202350-17				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202350-17				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202350-17				
PCB-1254 (Arochlor 1254)	4.3		0.41	0.120	ug/l	1	PREM	E202350-17	5.09	6.72	2.61	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202350-17				

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Location Identifier: WT-AC-03-092

Sample Identifier 2001862 02/11/2002 13:05 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.47		0.010	0	mg/L	1	PREM	E202350-18	.484	.553	.414	Pass
Barium	0.60		0.010	0.000680	mg/L	1	PREM	E202350-18	.583	.646	.521	Pass
Cadmium	0.14		0.0020	0.000320	mg/L	1	PREM	E202350-18	.155	.173	.137	Pass
Chromium, Total	0.26		0.010	0.000740	mg/L	1	PREM	E202350-18	.266	.295	.238	Pass
Copper	0.40		0.010	0.000870	mg/L	1	PREM	E202350-18	.413	.460	.366	Pass
Lead	0.39		0.0040	0.00175	mg/L	1	PREM	E202350-18	.407	1.020	.356	Pass
Mercury	0.015		0.00020	0.000022	mg/L	1	PREM	E202350-18	.0202	.0252	.0151	FAIL
Nickel	0.96		0.010	0.00108	mg/L	1	PREM	E202350-18	.991	1.100	.886	Pass
Selenium	0.76		0.010	0.00460	mg/L	1	PREM	E202350-18	.786	.901	.671	Pass
Silver	0.35		0.0020	0.00627	mg/L	1	PREM	E202350-18	.358	.401	.314	Pass
Zinc	1.2		0.010	0.00198	mg/L	1	PREM	E202350-18	1.330	1.500	1.170	Pass

Location Identifier: WT-AC-03-093

Sample Identifier 2001863 02/11/2002 13:07 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.17		0.010		mg/L	1	PREM	E202350-19				FALSE POSITIVE

Location Identifier: WT-AC-03-094

Sample Identifier 2001864 02/11/2002 13:09 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	98		5.4	0.330	ug/l	1	PREM	E202350-20	112	118	49.5	Pass
1,2-Dichlorobenzene	24		5.4	0.400	ug/l	1	PREM	E202350-20	30.8	33.3	0	Pass
1,3-Dichlorobenzene	ND<5.4	U	5.4	0.310	ug/l	1	PREM	E202350-20				
1,4-Dichlorobenzene	ND<5.4	U	5.4	0.300	ug/l	1	PREM	E202350-20				
2,4,5-Trichlorophenol	74		5.4	0.550	ug/l	1	PREM	E202350-20	83.8	94.2	46.0	Pass
2,4,6-Trichlorophenol	67		5.4	0.420	ug/l	1	PREM	E202350-20	76.1	87.8	36.1	Pass
2,4-Dichlorophenol	46		5.4	0.380	ug/l	1	PREM	E202350-20	49.0	53.9	25.0	Pass
2,4-Dimethylphenol	89		5.4	0.640	ug/l	1	PREM	E202350-20	113	128	44.8	Pass
2,4-Dinitrophenol	100		5.4	0.0700	ug/l	1	PREM	E202350-20	145	155	25.0	Pass
2,4-Dinitrotoluene	42		5.4	0.600	ug/l	1	PREM	E202350-20	48.2	55.8	24.5	Pass
2,6-Dinitrotoluene	82		5.4	0.530	ug/l	1	PREM	E202350-20	92.5	107	49.6	Pass
2-Chloronaphthalene	160		5.4	0.510	ug/l	1	PREM	E202350-20	177	186	92.6	Pass

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2-Chlorophenol	150		5.4	0.400	ug/l	1	PREM	E202350-20	170	185	75.3	Pass
2-Methylnaphthalene	ND<5.4	U	5.4	0.430	ug/l	1	PREM	E202350-20				
2-Methylphenol (o-Cresol)	48		5.4	0.420	ug/l	1	PREM	E202350-20	71.4	92.3	17.1	Pass
2-Nitroaniline	ND<11	U	11	0.550	ug/l	1	PREM	E202350-20				
2-Nitrophenol	26		5.4	0.420	ug/l	1	PREM	E202350-20	29.4	33.0	14.4	Pass
3,3'-Dichlorobenzidine	ND<5.4	U	5.4	0.730	ug/l	1	PREM	E202350-20				
3-Nitroaniline	ND<11	U	11	0.440	ug/l	1	PREM	E202350-20				
4,6-Dinitro-2-Methylphenol	70		5.4	0.300	ug/l	1	PREM	E202350-20	72.8	82.5	29.7	Pass
4-Bromophenyl Phenyl ether	160		5.4	0.530	ug/l	1	PREM	E202350-20	177	201	99.4	Pass
4-Chloro-3-Methylphenol	ND<5.4	U	5.4	0.440	ug/l	1	PREM	E202350-20				
4-Chloroaniline	ND<11	U	11	0.410	ug/l	1	PREM	E202350-20				
4-Chlorophenyl Phenyl ether	ND<5.4	U	5.4	0.540	ug/l	1	PREM	E202350-20				
4-Nitroaniline	ND<11	U	11	0.480	ug/l	1	PREM	E202350-20				
4-Nitrophenol	43		5.4	0.290	ug/l	1	PREM	E202350-20	60.3	69.5	0	Pass
Acenaphthene	46		5.4	0.450	ug/l	1	PREM	E202350-20	55.6	62.8	29.8	Pass
Acenaphthylene	ND<5.4	U	5.4	0.470	ug/l	1	PREM	E202350-20				
Anthracene	160		5.4	0.560	ug/l	1	PREM	E202350-20	172	194	84.2	Pass
Benzo(a)anthracene	ND<5.4	U	5.4	0.420	ug/l	1	PREM	E202350-20				
Benzo(a)pyrene	23		5.4	0.350	ug/l	1	PREM	E202350-20	24.7	28.2	11.8	Pass
Benzo(b)fluoranthene	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E202350-20				
Benzo(g,h,i)perylene	ND<5.4	U	5.4	0.420	ug/l	1	PREM	E202350-20				
Benzo(k)fluoranthene	21		5.4	0.360	ug/l	1	PREM	E202350-20	23.9	32.8	10.5	Pass
Benzyl Butyl Phthalate	59		5.4	0.460	ug/l	1	PREM	E202350-20	65.9	87.2	15.3	Pass
Carbazole	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E202350-20				
Chrysene	46		5.4	0.440	ug/l	1	PREM	E202350-20	46.4	53.5	26.6	Pass
Cresol,m- & p-	ND<5.4	U	5.4	0.740	ug/l	1	PREM	E202350-20				
Dibenz(a,h)anthracene	ND<5.4	U	5.4	0.370	ug/l	1	PREM	E202350-20				
Dibenzofuran	61		11	0.480	ug/l	1	PREM	E202350-20	71.8	93.5	23.9	Pass
Diethyl Phthalate	ND<5.4	U	5.4	0.660	ug/l	1	PREM	E202350-20				
Dimethyl Phthalate	53		5.4	0.600	ug/l	1	PREM	E202350-20	61.4	78.0	14.9	Pass
Fluoranthene	12		5.4	0.480	ug/l	1	PREM	E202350-20	13.9	15.9	10.4	Pass
Fluorene	36		5.4	0.540	ug/l	1	PREM	E202350-20	42.9	49.5	24.4	Pass
Hexachlorobenzene	34		5.4	0.550	ug/l	1	PREM	E202350-20	38.1	44.0	22.1	Pass
Hexachlorobutadiene	ND<5.4	U	5.4	0.320	ug/l	1	PREM	E202350-20				
Hexachlorocyclopentadiene	ND<5.4	U	5.4	0.250	ug/l	1	PREM	E202350-20				
Hexachloroethane	52		5.4	0.270	ug/l	1	PREM	E202350-20	72.9	77.5	21.7	Pass
Indeno(1,2,3-c,d)pyrene	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E202350-20				
Isophorone	48		5.4	0.440	ug/l	1	PREM	E202350-20	55.8	64.6	29.9	Pass
Naphthalene	79		5.4	0.390	ug/l	1	PREM	E202350-20	90.2	102	39.2	Pass
Nitrobenzene	61		5.4	0.380	ug/l	1	PREM	E202350-20	73.9	84.4	36.7	Pass

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Pentachlorophenol	41		5.4	0.380	ug/l	1	PREM	E202350-20	57.8	68.6	23.3	Pass
Phenanthrene	70		5.4	0.560	ug/l	1	PREM	E202350-20	77.3	88.5	43.0	Pass
Phenol	9.6		5.4	0.360	ug/l	1	PREM	E202350-20	26.6	30.9	0	Pass
Pyrene	16		5.4	0.390	ug/l	1	PREM	E202350-20	19.0	26.5	10.0	Pass
bis(2-Chloroethoxy) Methane	ND<5.4	U	5.4	0.460	ug/l	1	PREM	E202350-20				
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.4	U	5.4	0.350	ug/l	1	PREM	E202350-20				
bis(2-Chloroisopropyl) ether	56		11	0.310	ug/l	1	PREM	E202350-20	131	151	32.3	Pass
bis(2-Ethylhexyl) Phthalate	90		5.4	1.77	ug/l	1	PREM	E202350-20	98.2	123	39.4	Pass
di-n-Butyl Phthalate	ND<5.4	U	5.4	1.14	ug/l	1	PREM	E202350-20				
di-n-Octylphthalate	41		5.4	0.500	ug/l	1	PREM	E202350-20	44.6	57.4	19.5	Pass
n-Nitrosodi-n-Propylamine	ND<5.4	U	5.4	0.580	ug/l	1	PREM	E202350-20				
n-Nitrosodiphenylamine	32		5.4	0.640	ug/l	1	PREM	E202350-20	41.6	50.9	17.6	Pass

Location Identifier: WT-AC-03-095

Sample Identifier 2001865 02/11/2002 13:11 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	41		2.0	0.750	mg/L	5	PREM	E202350-21	55.6	69.5	33.4	Pass

Location Identifier: WT-AC-03-096

Sample Identifier 2001866 02/11/2002 13:13 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	60		2.0	0.750	mg/L	5	PREM	E202350-22	55.6	69.5	33.4	Pass

Location Identifier: WT-AC-03-097

Sample Identifier 2001867 02/11/2002 13:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	38		5.0	0.184	ug/l	1	PREM	E202350-23	39.6	47.8	30.1	Pass
1,1,2,2-Tetrachloroethane	120		5.0	0.243	ug/l	1	PREM	E202350-23	133	168	96.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E202350-23				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E202350-23				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E202350-23				
1,2-Dichloroethane	65		5.0	0.288	ug/l	1	PREM	E202350-23	73.8	90.0	58.7	Pass
1,2-Dichloropropane	57		5.0	0.234	ug/l	1	PREM	E202350-23	64.5	75.5	50.3	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E202350-23				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E202350-23				
Benzene	30		5.0	0.184	ug/l	1	PREM	E202350-23	30.1	36.1	36.1	FAIL

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Bromodichloromethane	48		5.0	0.172	ug/l	1	PREM	E202350-23	55.3	66.5	44.7	Pass
Bromoform	59		5.0	0.127	ug/l	1	PREM	E202350-23	66.4	82.9	51.5	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E202350-23				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E202350-23				
Carbon Tetrachloride	32		5.0	0.228	ug/l	1	PREM	E202350-23	33.9	43.4	25.5	Pass
Chlorobenzene	13		5.0	0.157	ug/l	1	PREM	E202350-23	14.4	16.9	12.0	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E202350-23				
Chloroform	13		5.0	0.226	ug/l	1	PREM	E202350-23	13.8	16.6	11.2	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E202350-23				
Dibromochloromethane	37		5.0	0.156	ug/l	1	PREM	E202350-23	43.5	52.9	33.6	Pass
Ethylbenzene	24		5.0	0.176	ug/l	1	PREM	E202350-23	27.1	32.4	21.1	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E202350-23				
Methyl Isobutyl ketone (4-Methyl-2-Penta	51		10	1.89	ug/l	1	PREM	E202350-23	59.8	75.9	35.1	Pass
Methylene Chloride	25		5.0	0.789	ug/l	1	PREM	E202350-23	27.8	35.2	21.1	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E202350-23				
Tetrachloroethylene (PCE)	44		5.0	0.171	ug/l	1	PREM	E202350-23	50.3	59.3	38.5	Pass
Toluene	35		5.0	0.188	ug/l	1	PREM	E202350-23	40.2	59.3	32.4	Pass
Trichloroethylene (TCE)	23		5.0	0.220	ug/l	1	PREM	E202350-23	24.8	29.5	18.9	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E202350-23				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E202350-23				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E202350-23				
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E202350-23				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E202350-23				

Location Identifier: WT-AC-03-098

Sample Identifier 2001889

02/14/2002 13:30

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202511-15				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202511-15				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202511-15				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202511-15				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202511-15				
PCB-1254 (Arochlor 1254)	5.7		0.40	0.120	ug/l	1	PREM	E202511-15	6.11	8.07	3.13	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202511-15				

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Location Identifier: WT-AC-03-099

Sample Identifier 2001890 02/14/2002 13:32 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.22		0.010	0	mg/L	1	PREM	E202511-16	.227	.259	.194	Pass
Barium	0.49		0.010	0.000680	mg/L	1	PREM	E202511-16	.486	.538	.434	Pass
Cadmium	0.047		0.0020	0.000320	mg/L	1	PREM	E202511-16	.0509	.056	.045	Pass
Chromium, Total	0.22		0.010	0.000740	mg/L	1	PREM	E202511-16	.233	.258	.208	Pass
Copper	0.15		0.010	0.000870	mg/L	1	PREM	E202511-16	.156	.174	.138	Pass
Lead	0.30		0.0040	0.00175	mg/L	1	PREM	E202511-16	.313	.352	.275	Pass
Mercury	0.0025		0.00020	0.000022	mg/L	1	PREM	E202511-16	.0034	.00425	.00254	FAIL
Nickel	0.18		0.010	0.00108	mg/L	1	PREM	E202511-16	.184	.203	.164	Pass
Selenium	0.27		0.010	0.00460	mg/L	1	PREM	E202511-16	.277	.318	.236	Pass
Silver	0.35		0.0020	0.00627	mg/L	1	PREM	E202511-16	.370	.414	.325	Pass
Zinc	0.13		0.010	0.00198	mg/L	1	PREM	E202511-16	.137	.154	.120	Pass

Location Identifier: WT-AC-03-100

Sample Identifier 2001891 02/14/2002 13:35 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.19		0.010		mg/L	1	PREM	E202511-17	.193	.254	.128	Pass

Location Identifier: WT-AC-03-101

Sample Identifier 2001892 02/14/2002 13:37 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	80		5.3	0.330	ug/l	1	PREM	E202511-18	114	118	50.4	Pass
1,2-Dichlorobenzene	24		5.3	0.400	ug/l	1	PREM	E202511-18	37.0	40.8	0	Pass
1,3-Dichlorobenzene	ND<5.3	U	5.3	0.310	ug/l	1	PREM	E202511-18				
1,4-Dichlorobenzene	60		5.3	0.300	ug/l	1	PREM	E202511-18	98.0	107	0	Pass
2,4,5-Trichlorophenol	100		5.3	0.550	ug/l	1	PREM	E202511-18	147	165	75.6	Pass
2,4,6-Trichlorophenol	110		5.3	0.420	ug/l	1	PREM	E202511-18	152	176	74.6	Pass
2,4-Dichlorophenol	88		5.3	0.380	ug/l	1	PREM	E202511-18	112	119	56.2	Pass
2,4-Dimethylphenol	70		5.3	0.640	ug/l	1	PREM	E202511-18	92.2	104	36.0	Pass
2,4-Dinitrophenol	66		5.3	0.0700	ug/l	1	PREM	E202511-18	105	117	19.7	Pass
2,4-Dinitrotoluene	43		5.3	0.600	ug/l	1	PREM	E202511-18	57.0	66.2	29.9	Pass
2,6-Dinitrotoluene	ND<5.3	U	5.3	0.530	ug/l	1	PREM	E202511-18				
2-Chloronaphthalene	86		5.3	0.510	ug/l	1	PREM	E202511-18	124	139	48.0	Pass

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2-Chlorophenol	81		5.3	0.400	ug/l	1	PREM	E202511-18	131	143	58.6	Pass
2-Methylnaphthalene	ND<5.3	U	5.3	0.430	ug/l	1	PREM	E202511-18				
2-Methylphenol (o-Cresol)	10		5.3	0.420	ug/l	1	PREM	E202511-18	20.5	23.4	0	Pass
2-Nitroaniline	ND<10	U	10	0.550	ug/l	1	PREM	E202511-18				
2-Nitrophenol	14		5.3	0.420	ug/l	1	PREM	E202511-18	21.3	23.7	10.6	Pass
3,3'-Dichlorobenzidine	ND<5.3	U	5.3	0.730	ug/l	1	PREM	E202511-18				
3-Nitroaniline	ND<10	U	10	0.440	ug/l	1	PREM	E202511-18				
4,6-Dinitro-2-Methylphenol	ND<5.3	U	5.3	0.300	ug/l	1	PREM	E202511-18				
4-Bromophenyl Phenyl ether	ND<5.3	U	5.3	0.530	ug/l	1	PREM	E202511-18				
4-Chloro-3-Methylphenol	48		5.3	0.440	ug/l	1	PREM	E202511-18	58.5	66.4	30.7	Pass
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E202511-18				
4-Chlorophenyl Phenyl ether	70		5.3	0.540	ug/l	1	PREM	E202511-18	95.2	107	50.4	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E202511-18				
4-Nitrophenol	27		5.3	0.290	ug/l	1	PREM	E202511-18	78.4	88.1	0	Pass
Acenaphthene	ND<5.3	U	5.3	0.450	ug/l	1	PREM	E202511-18				
Acenaphthylene	28		5.3	0.470	ug/l	1	PREM	E202511-18	39.8	44.0	20.9	Pass
Anthracene	67		5.3	0.560	ug/l	1	PREM	E202511-18	91.1	104	47.2	Pass
Benzo(a)anthracene	35		5.3	0.420	ug/l	1	PREM	E202511-18	42.7	46.0	28.3	Pass
Benzo(a)pyrene	ND<5.3	U	5.3	0.350	ug/l	1	PREM	E202511-18				
Benzo(b)fluoranthene	40		5.3	0.400	ug/l	1	PREM	E202511-18	57.6	70.1	27.2	Pass
Benzo(g,h,i)perylene	22		5.3	0.420	ug/l	1	PREM	E202511-18	22.8	28.8	0	Pass
Benzo(k)fluoranthene	ND<5.3	U	5.3	0.360	ug/l	1	PREM	E202511-18				
Benzyl Butyl Phthalate	ND<5.3	U	5.3	0.460	ug/l	1	PREM	E202511-18				
Carbazole	ND<5.3	U	5.3	0.400	ug/l	1	PREM	E202511-18				
Chrysene	50		5.3	0.440	ug/l	1	PREM	E202511-18	60.3	69.7	33.5	Pass
Cresol,m- & p-	ND<5.3	U	5.3	0.740	ug/l	1	PREM	E202511-18				
Dibenz(a,h)anthracene	28		5.3	0.370	ug/l	1	PREM	E202511-18	29.8	36.5	13.1	Pass
Dibenzofuran	100		10	0.480	ug/l	1	PREM	E202511-18	148	179	45.4	Pass
Diethyl Phthalate	59		5.3	0.660	ug/l	1	PREM	E202511-18	80.9	103	22.0	Pass
Dimethyl Phthalate	42		5.3	0.600	ug/l	1	PREM	E202511-18	58.6	74.6	15.3	Pass
Fluoranthene	ND<5.3	U	5.3	0.480	ug/l	1	PREM	E202511-18				
Fluorene	31		5.3	0.540	ug/l	1	PREM	E202511-18	42.2	48.7	24.1	Pass
Hexachlorobenzene	ND<5.3	U	5.3	0.550	ug/l	1	PREM	E202511-18				
Hexachlorobutadiene	110		5.3	0.320	ug/l	1	PREM	E202511-18	166	170	57.6	Pass
Hexachlorocyclopentadiene	ND<5.3	U	5.3	0.250	ug/l	1	PREM	E202511-18				
Hexachloroethane	ND<5.3	U	5.3	0.270	ug/l	1	PREM	E202511-18				
Indeno(1,2,3-c,d)pyrene	33		5.3	0.400	ug/l	1	PREM	E202511-18	37.8	43.3	14.2	Pass
Isophorone	100		5.3	0.440	ug/l	1	PREM	E202511-18	139	162	70.0	Pass
Naphthalene	87		5.3	0.390	ug/l	1	PREM	E202511-18	140	158	58.6	Pass
Nitrobenzene	41		5.3	0.380	ug/l	1	PREM	E202511-18	56.8	64.8	28.6	Pass

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Pentachlorophenol	99		5.3	0.380	ug/l	1	PREM	E202511-18	128	153	58.0	Pass
Phenanthrene	41		5.3	0.560	ug/l	1	PREM	E202511-18	53.5	60.7	32.6	Pass
Phenol	12		5.3	0.360	ug/l	1	PREM	E202511-18	41.2	46.4	0	Pass
Pyrene	27		5.3	0.390	ug/l	1	PREM	E202511-18	35.4	45.2	18.2	Pass
bis(2-Chloroethoxy) Methane	29		5.3	0.460	ug/l	1	PREM	E202511-18	47.2	50.8	24.9	Pass
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.3	U	5.3	0.350	ug/l	1	PREM	E202511-18				
bis(2-Chloroisopropyl) ether	14		10	0.310	ug/l	1	PREM	E202511-18	33.4	35.0	14.0	
bis(2-Ethylhexyl) Phthalate	88		5.3	1.77	ug/l	1	PREM	E202511-18	121	151	45.8	Pass
di-n-Butyl Phthalate	30		5.3	1.14	ug/l	1	PREM	E202511-18	37.6	47.8	20.7	Pass
di-n-Octylphthalate	ND<5.3	U	5.3	0.500	ug/l	1	PREM	E202511-18				
n-Nitrosodi-n-Propylamine	82		5.3	0.580	ug/l	1	PREM	E202511-18	131	149	62.4	Pass
n-Nitrosodiphenylamine	ND<5.3	U	5.3	0.640	ug/l	1	PREM	E202511-18				

Location Identifier: WT-AC-03-102

Sample Identifier 2001893

02/14/2002

13:39

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	71		2.0	0.750	mg/L	5	PREM	E202511-19	69.5	86.9	41.7	Pass

Location Identifier: WT-AC-03-103

Sample Identifier 2001894

02/14/2002

13:40

Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	35		5.0	0.184	ug/l	1	PREM	E202511-20	34.7	41.9	26.4	Pass
1,1,2,2-Tetrachloroethane	ND<5.0	U	5.0	0.243	ug/l	1	PREM	E202511-20				
1,1,2-Trichloroethane	120		5.0	0.175	ug/l	1	PREM	E202511-20	129	154	101	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E202511-20				
1,1-Dichloroethene	13		5.0	0.274	ug/l	1	PREM	E202511-20	12.4	18.8	7.81	Pass
1,2-Dichloroethane	44		5.0	0.288	ug/l	1	PREM	E202511-20	44.7	54.8	35.7	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E202511-20				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E202511-20				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E202511-20				
Benzene	28		5.0	0.184	ug/l	1	PREM	E202511-20	29.3	35.1	23.8	Pass
Bromodichloromethane	56		5.0	0.172	ug/l	1	PREM	E202511-20	59.1	71.0	47.8	Pass
Bromoform	54		5.0	0.127	ug/l	1	PREM	E202511-20	55.9	69.8	43.2	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E202511-20				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E202511-20				
Carbon Tetrachloride	60		5.0	0.228	ug/l	1	PREM	E202511-20	61.1	78.1	45.8	Pass
Chlorobenzene	33		5.0	0.157	ug/l	1	PREM	E202511-20	35.1	41.3	28.3	Pass

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Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E202511-20				
Chloroform	48		5.0	0.226	ug/l	1	PREM	E202511-20	48.4	57.3	38.4	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E202511-20				
Dibromochloromethane	43		5.0	0.156	ug/l	1	PREM	E202511-20	46.0	56.0	35.5	Pass
Ethylbenzene	14		5.0	0.176	ug/l	1	PREM	E202511-20	15.0	17.9	11.8	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E202511-20				
Methyl Isobutyl ketone (4-Methyl-2-Penta	84		10	1.89	ug/l	1	PREM	E202511-20	83.1	111	52.5	Pass
Methylene Chloride	29		5.0	0.789	ug/l	1	PREM	E202511-20	29.8	37.7	22.6	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E202511-20				
Tetrachloroethylene (PCE)	35		5.0	0.171	ug/l	1	PREM	E202511-20	36.2	42.8	27.7	Pass
Toluene	18		5.0	0.188	ug/l	1	PREM	E202511-20	19.3	22.7	15.4	Pass
Trichloroethylene (TCE)	36		5.0	0.220	ug/l	1	PREM	E202511-20	35.6	42.3	27.0	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E202511-20				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E202511-20				
m,p-Xylene (Sum of Isomers)	23		5.0	0.424	ug/l	1	PREM	E202511-20	23.1	28.6	16.1	Pass
o-Xylene (1,2-Dimethylbenzene)	34		5.0	0.171	ug/l	1	PREM	E202511-20	37.2	46.1	26.0	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E202511-20				

Location Identifier: WT-AC-03-105

Sample Identifier 2001924 02/19/2002 13:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202647-20				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202647-20				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202647-20				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202647-20				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202647-20				
PCB-1254 (Arochlor 1254)	2.3		0.40	0.120	ug/l	1	PREM	E202647-20	2.14	2.82	1.10	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202647-20				

Location Identifier: WT-AC-03-106

Sample Identifier 2001925 02/19/2002 13:03 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.71		0.010	0	mg/L	1	PREM	E202647-21	0.709	0.812	0.606	Pass
Barium	0.68		0.010	0.000680	mg/L	1	PREM	E202647-21	0.662	0.733	0.591	Pass
Cadmium	0.20		0.0020	0.000320	mg/L	1	PREM	E202647-21	0.209	0.233	0.185	Pass
Chromium, Total	0.30		0.010	0.000740	mg/L	1	PREM	E202647-21	0.309	0.343	0.275	Pass
Copper	0.32		0.010	0.000870	mg/L	1	PREM	E202647-21	0.338	0.376	0.300	Pass

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Lead	0.19	0.0040	0.00175	mg/L	1	PREM	E202647-21	0.198	0.223	0.173	Pass
Mercury	0.0048	0.0002	0.000022	mg/L	1	PREM	E202647-21	0.004690	0.00586	0.00352	Pass
Nickel	0.79	0.010	0.00108	mg/L	1	PREM	E202647-21	0.808	0.894	0.722	Pass
Selenium	0.59	0.010	0.00460	mg/L	1	PREM	E202647-21	0.597	0.685	0.509	Pass
Silver	0.18	0.0020	0.00627	mg/L	1	PREM	E202647-21	0.185	0.207	0.163	Pass
Zinc	0.94	0.010	0.00198	mg/L	1	PREM	E202647-21	0.971	1.090	0.850	Pass

Location Identifier: WT-AC-03-107

Sample Identifier 2001926 02/19/2002 13:06 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.94		0.050		mg/L	5	PREM	E202647-22	1.03	1.31	0.716	Pass

Location Identifier: WT-AC-03-108

Sample Identifier 2001927 02/19/2002 13:09 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	16		5.5	0.330	ug/l	1	PREM	E202647-23	24.1	27.8	10.9	Pass
1,2-Dichlorobenzene	60		5.5	0.400	ug/l	1	PREM	E202647-23	92.4	97.0	32.3	Pass
1,3-Dichlorobenzene	ND<5.5	U	5.5	0.310	ug/l	1	PREM	E202647-23				
1,4-Dichlorobenzene	ND<5.5	U	5.5	0.300	ug/l	1	PREM	E202647-23				
2,4,5-Trichlorophenol	56		5.5	0.550	ug/l	1	PREM	E202647-23	75.6	85.0	42.2	Pass
2,4,6-Trichlorophenol	39		5.5	0.420	ug/l	1	PREM	E202647-23	53.5	61.5	27.2	Pass
2,4-Dichlorophenol	87		5.5	0.380	ug/l	1	PREM	E202647-23	118	126	59.1	Pass
2,4-Dimethylphenol	35		5.5	0.640	ug/l	1	PREM	E202647-23	51.3	58.6	18.8	Pass
2,4-Dinitrophenol	100		5.5	0.0700	ug/l	1	PREM	E202647-23	138	148	24.1	Pass
2,4-Dinitrotoluene	80		5.5	0.600	ug/l	1	PREM	E202647-23	105	124	59.2	Pass
2,6-Dinitrotoluene	ND<5.5	U	5.5	0.530	ug/l	1	PREM	E202647-23				
2-Chloronaphthalene	13		5.5	0.510	ug/l	1	PREM	E202647-23	18.5	22.9	9.85	Pass
2-Chlorophenol	42		5.5	0.400	ug/l	1	PREM	E202647-23	62.0	68.7	29.1	Pass
2-Methylnaphthalene	ND<5.5	U	5.5	0.430	ug/l	1	PREM	E202647-23				
2-Methylphenol (o-Cresol)	18		5.5	0.420	ug/l	1	PREM	E202647-23	28.9	33.0	12.2	Pass
2-Nitroaniline	ND<11	U	11	0.550	ug/l	1	PREM	E202647-23				
2-Nitrophenol	11		5.5	0.420	ug/l	1	PREM	E202647-23	14.9	16.3	7.67	Pass
3,3'-Dichlorobenzidine	ND<5.5	U	5.5	0.730	ug/l	1	PREM	E202647-23				
3-Nitroaniline	ND<11	U	11	0.440	ug/l	1	PREM	E202647-23				
4,6-Dinitro-2-Methylphenol	110		5.5	0.300	ug/l	1	PREM	E202647-23	144	177	48.7	Pass
4-Bromophenyl Phenyl ether	75		5.5	0.530	ug/l	1	PREM	E202647-23	98.3	112	56.3	Pass
4-Chloro-3-Methylphenol	48		5.5	0.440	ug/l	1	PREM	E202647-23	66.4	75.4	35.1	Pass

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4-Chloroaniline	ND<11	U	11	0.410	ug/l	1	PREM	E202647-23				
4-Chlorophenyl Phenyl ether	66		5.5	0.540	ug/l	1	PREM	E202647-23	86.9	97.6	46.5	Pass
4-Nitroaniline	ND<11	U	11	0.480	ug/l	1	PREM	E202647-23				
4-Nitrophenol	20		5.5	0.290	ug/l	1	PREM	E202647-23	64.6	73.9	0	Pass
Acenaphthene	ND<5.5	U	5.5	0.450	ug/l	1	PREM	E202647-23				
Acenaphthylene	12		5.5	0.470	ug/l	1	PREM	E202647-23	18.3	21.3	9.34	Pass
Anthracene	14		5.5	0.560	ug/l	1	PREM	E202647-23	20.6	23.3	11.2	Pass
Benzo(a)anthracene	18		5.5	0.420	ug/l	1	PREM	E202647-23	25.0	26.2	17.2	Pass
Benzo(a)pyrene	ND<5.5	U	5.5	0.350	ug/l	1	PREM	E202647-23				
Benzo(b)fluoranthene	10		5.5	0.400	ug/l	1	PREM	E202647-23	15.1	17.9	8.61	Pass
Benzo(g,h,i)perylene	ND<5.5	U	5.5	0.420	ug/l	1	PREM	E202647-23				
Benzo(k)fluoranthene	ND<5.5	U	5.5	0.360	ug/l	1	PREM	E202647-23				
Benzyl Butyl Phthalate	79		5.5	0.460	ug/l	1	PREM	E202647-23	111	123	45.1	Pass
Carbazole	ND<5.5	U	5.5	0.400	ug/l	1	PREM	E202647-23				
Chrysene	19		5.5	0.440	ug/l	1	PREM	E202647-23	25.3	28.8	16.0	Pass
Cresol,m- & p-	ND<5.5	U	5.5	0.740	ug/l	1	PREM	E202647-23				
Dibenz(a,h)anthracene	ND<5.5	U	5.5	0.370	ug/l	1	PREM	E202647-23				
Dibenzofuran	45		11	0.480	ug/l	1	PREM	E202647-23	64.9	70.1	34.9	Pass
Diethyl Phthalate	100		5.5	0.660	ug/l	1	PREM	E202647-23	142	169	51.5	Pass
Dimethyl Phthalate	10		5.5	0.600	ug/l	1	PREM	E202647-23	14.5	17.1	5.54	Pass
Fluoranthene	14		5.5	0.480	ug/l	1	PREM	E202647-23	19.8	22.7	13.6	Pass
Fluorene	28		5.5	0.540	ug/l	1	PREM	E202647-23	39.4	45.6	22.5	Pass
Hexachlorobenzene	ND<5.5	U	5.5	0.550	ug/l	1	PREM	E202647-23				
Hexachlorobutadiene	ND<5.5	U	5.5	0.320	ug/l	1	PREM	E202647-23				
Hexachlorocyclopentadiene	ND<5.5	U	5.5	0.250	ug/l	1	PREM	E202647-23				
Hexachloroethane	ND<5.5	U	5.5	0.270	ug/l	1	PREM	E202647-23				
Indeno(1,2,3-c,d)pyrene	11		5.5	0.400	ug/l	1	PREM	E202647-23	20.0	21.0	9.27	Pass
Isophorone	42		5.5	0.440	ug/l	1	PREM	E202647-23	58.1	67.3	31.0	Pass
Naphthalene	94		5.5	0.390	ug/l	1	PREM	E202647-23	139	156	58.2	Pass
Nitrobenzene	65		5.5	0.380	ug/l	1	PREM	E202647-23	98.0	112	48.1	Pass
Pentachlorophenol	52		5.5	0.380	ug/l	1	PREM	E202647-23	78.0	92.9	33.3	Pass
Phenanthrene	17		5.5	0.560	ug/l	1	PREM	E202647-23	24.4	27.3	14.5	Pass
Phenol	40		5.5	0.360	ug/l	1	PREM	E202647-23	134	145	29.7	Pass
Pyrene	22		5.5	0.390	ug/l	1	PREM	E202647-23	30.2	39.3	15.6	Pass
bis(2-Chloroethoxy) Methane	60		5.5	0.460	ug/l	1	PREM	E202647-23	118	124	62.2	FAIL
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.5	U	5.5	0.350	ug/l	1	PREM	E202647-23				
bis(2-Chloroisopropyl) ether	ND<11	U	11	0.310	ug/l	1	PREM	E202647-23				
bis(2-Ethylhexyl) Phthalate	15		5.5	1.77	ug/l	1	PREM	E202647-23	20.9	26.6	14.1	Pass
di-n-Butyl Phthalate	ND<5.5	U	5.5	1.14	ug/l	1	PREM	E202647-23				
di-n-Octylphthalate	44		5.5	0.500	ug/l	1	PREM	E202647-23	61.1	77.2	24.7	Pass

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n-Nitrosodi-n-Propylamine	ND<5.5	U	5.5	0.580	ug/l	1	PREM	E202647-23				
n-Nitrosodiphenylamine	27		5.5	0.640	ug/l	1	PREM	E202647-23	49.7	60.1	21.0	Pass

Location Identifier: WT-AC-03-109

Sample Identifier 2001928 02/19/2002 13:12 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	100		2.4	0.900	mg/L	6	PREM	E202647-24	88.4	110	53.0	Pass

Location Identifier: WT-AC-03-110

Sample Identifier 2001929 02/19/2002 13:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	36		5.0	0.184	ug/l	1	PREM	E202647-25	35.6	43.0	27.1	Pass
1,1,2,2-Tetrachloroethane	86		5.0	0.243	ug/l	1	PREM	E202647-25	89.0	112	64.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E202647-25				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E202647-25				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E202647-25				
1,2-Dichloroethane	44		5.0	0.288	ug/l	1	PREM	E202647-25	44.7	54.8	35.7	Pass
1,2-Dichloropropane	ND<5.0	U	5.0	0.234	ug/l	1	PREM	E202647-25				
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E202647-25				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E202647-25				
Benzene	55		5.0	0.184	ug/l	1	PREM	E202647-25	50	59.6	40.8	Pass
Bromodichloromethane	28		5.0	0.172	ug/l	1	PREM	E202647-25	27.3	32.9	21.9	Pass
Bromoform	26		5.0	0.127	ug/l	1	PREM	E202647-25	25.6	32.0	19.2	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E202647-25				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E202647-25				
Carbon Tetrachloride	45		5.0	0.228	ug/l	1	PREM	E202647-25	40.7	52.1	30.6	Pass
Chlorobenzene	58		5.0	0.157	ug/l	1	PREM	E202647-25	54.7	64.5	43.7	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E202647-25				
Chloroform	72		5.0	0.226	ug/l	1	PREM	E202647-25	72.1	85.2	56.9	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E202647-25				
Dibromochloromethane	23		5.0	0.156	ug/l	1	PREM	E202647-25	22.6	27.4	17.4	Pass
Ethylbenzene	61		5.0	0.176	ug/l	1	PREM	E202647-25	58.1	69.8	44.9	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E202647-25				
Methyl Isobutyl ketone (4-Methyl-2-Penta	72		10	1.89	ug/l	1	PREM	E202647-25	80.9	107	49.8	Pass
Methylene Chloride	62		5.0	0.789	ug/l	1	PREM	E202647-25	58.6	73.3	44.3	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E202647-25				
Tetrachloroethylene (PCE)	28		5.0	0.171	ug/l	1	PREM	E202647-25	27.1	32.1	20.7	Pass

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Toluene	56		5.0	0.188	ug/l	1	PREM	E202647-25	53.0	61.4	42.8	Pass
Trichloroethylene (TCE)	42		5.0	0.220	ug/l	1	PREM	E202647-25	36.6	43.5	27.7	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E202647-25				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E202647-25				
m,p-Xylene (Sum of Isomers)	57		5.0	0.424	ug/l	1	PREM	E202647-25	54.2	67.5	37.8	Pass
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E202647-25				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E202647-25				

Location Identifier: WT-AC-03-111

Sample Identifier 2001949 02/22/2002 12:30 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202826-6				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202826-6				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202826-6				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202826-6				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202826-6				
PCB-1254 (Arochlor 1254)	6.2		0.40	0.120	ug/l	1	PREM	E202826-6	8.65	11.4	4.43	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202826-6				

Location Identifier: WT-AC-03-112

Sample Identifier 2001957 02/26/2002 13:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202947-8				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202947-8				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202947-8				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202947-8				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202947-8				
PCB-1254 (Arochlor 1254)	5.2		0.40	0.120	ug/l	1	PREM	E202947-8	5.19	6.85	2.66	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E202947-8				

Location Identifier: WT-AC-03-113

Sample Identifier 2001958 02/26/2002 13:15 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.32		0.010	0	mg/L	1	PREM	E202947-9	.322	.369	.276	Pass
Barium	0.40		0.010	0.000680	mg/L	1	PREM	E202947-9	.389	.430	.347	Pass
Cadmium	0.099		0.0020	0.000320	mg/L	1	PREM	E202947-9	.103	.115	.0912	Pass

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Chromium, Total	0.18	0.010	0.000740 mg/L	1	PREM	E202947-9	.178	.197	.158	Pass
Copper	0.28	0.010	0.000870 mg/L	1	PREM	E202947-9	.275	.306	.244	Pass
Lead	0.27	0.0040	0.00175 mg/L	1	PREM	E202947-9	.271	.305	.238	Pass
Mercury	0.016	0.0002	0.000022 mg/L	1	PREM	E202947-9				
Nickel	0.67	0.010	0.00108 mg/L	1	PREM	E202947-9	.661	.731	.590	Pass
Selenium	0.54	0.010	0.00460 mg/L	1	PREM	E202947-9	.524	.601	.447	Pass
Silver	0.24	0.0020	0.00627 mg/L	1	PREM	E202947-9	.238	.267	.210	Pass
Zinc	0.88	0.010	0.00198 mg/L	1	PREM	E202947-9	.888	1.000	.778	Pass

Location Identifier: WT-AC-03-114

Sample Identifier 2001959 02/26/2002 13:20 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.30		0.010		mg/L	1	PREM	E202947-10	0.312	0.396	0.216	Pass

Location Identifier: WT-AC-03-115

Sample Identifier 2001960 02/26/2002 13:23 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	90		5.4	0.330	ug/l	1	PREM	E202947-11	113	117	32.9	Pass
1,2-Dichlorobenzene	93		5.4	0.400	ug/l	1	PREM	E202947-11	121	138	28.3	Pass
1,3-Dichlorobenzene	ND<5.4	U	5.4	0.310	ug/l	1	PREM	E202947-11				
1,4-Dichlorobenzene	ND<5.4	U	5.4	0.300	ug/l	1	PREM	E202947-11				
2,4,5-Trichlorophenol	54		5.4	0.550	ug/l	1	PREM	E202947-11	64.8	73.0	25.5	Pass
2,4,6-Trichlorophenol	110		5.4	0.420	ug/l	1	PREM	E202947-11	128	148	55.3	Pass
2,4-Dichlorophenol	46		5.4	0.380	ug/l	1	PREM	E202947-11	64.4	69.9	32.6	Pass
2,4-Dimethylphenol	14		5.4	0.640	ug/l	1	PREM	E202947-11	20.5	24.2	5.79	Pass
2,4-Dinitrophenol	110		5.4	0.0700	ug/l	1	PREM	E202947-11	161	170	27.1	Pass
2,4-Dinitrotoluene	74		5.4	0.600	ug/l	1	PREM	E202947-11	88.9	104	49.3	Pass
2,6-Dinitrotoluene	48		5.4	0.530	ug/l	1	PREM	E202947-11	56.3	63.7	30.0	Pass
2-Chloronaphthalene	25		5.4	0.510	ug/l	1	PREM	E202947-11	30.2	32.2	11.7	Pass
2-Chlorophenol	13		5.4	0.400	ug/l	1	PREM	E202947-11	15.5	18.6	0	Pass
2-Methylnaphthalene	ND<5.4	U	5.4	0.430	ug/l	1	PREM	E202947-11				
2-Methylphenol (o-Cresol)	130		5.4	0.420	ug/l	1	PREM	E202947-11	171	195	42.9	Pass
2-Nitroaniline	ND<11	U	11	0.550	ug/l	1	PREM	E202947-11				
2-Nitrophenol	22		5.4	0.420	ug/l	1	PREM	E202947-11	28.0	31.4	13.7	Pass
3,3'-Dichlorobenzidine	ND<5.4	U	5.4	0.730	ug/l	1	PREM	E202947-11				
3-Nitroaniline	ND<11	U	11	0.440	ug/l	1	PREM	E202947-11				
4,6-Dinitro-2-Methylphenol	140		5.4	0.300	ug/l	1	PREM	E202947-11	166	206	54.6	Pass

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4-Bromophenyl Phenyl ether	120		5.4	0.530	ug/l	1	PREM	E202947-11	142	161	80.3	Pass	
4-Chloro-3-Methylphenol	130		5.4	0.440	ug/l	1	PREM	E202947-11	144	164	78.0	Pass	
4-Chloroaniline	ND<11	U	11	0.410	ug/l	1	PREM	E202947-11					
4-Chlorophenyl Phenyl ether	25		5.4	0.540	ug/l	1	PREM	E202947-11	29.0	33.1	15.1	Pass	
4-Nitroaniline	ND<11	U	11	0.480	ug/l	1	PREM	E202947-11					
4-Nitrophenol	31		5.4	0.290	ug/l	1	PREM	E202947-11	77.6	87.3	0	Pass	
Acenaphthene	17		5.4	0.450	ug/l	1	PREM	E202947-11	20.4	23.3	9.26	Pass	
Acenaphthylene	43		5.4	0.470	ug/l	1	PREM	E202947-11	54.8	59.9	29.0	Pass	
Anthracene	46		5.4	0.560	ug/l	1	PREM	E202947-11	57.2	65.5	31.7	Pass	
Benzo(a)anthracene	26		5.4	0.420	ug/l	1	PREM	E202947-11	31.2	32.9	13.1	Pass	
Benzo(a)pyrene	ND<5.4	U	5.4	0.350	ug/l	1	PREM	E202947-11					
Benzo(b)fluoranthene	17		5.4	0.400	ug/l	1	PREM	E202947-11	22.0	25.5	14.1	Pass	
Benzo(g,h,i)perylene	ND<5.4	U	5.4	0.420	ug/l	1	PREM	E202947-11					
Benzo(k)fluoranthene	9.6		5.4	0.360	ug/l	1	PREM	E202947-11	10.5	16.8	0	Pass	
Benzyl Butyl Phthalate	50		5.4	0.460	ug/l	1	PREM	E202947-11	56.6	75.5	15.2	Pass	
Carbazole	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E202947-11					
Chrysene	34		5.4	0.440	ug/l	1	PREM	E202947-11	40.4	45.4	23.6	Pass	
Cresol,m- & p-	ND<5.4	U	5.4	0.740	ug/l	1	PREM	E202947-11					
Dibenz(a,h)anthracene	9.8		5.4	0.370	ug/l	1	PREM	E202947-11	11.9	13.3	0	Pass	
Dibenzofuran	71		11	0.480	ug/l	1	PREM	E202947-11	88.1	112	28.0	Pass	
Diethyl Phthalate	23		5.4	0.660	ug/l	1	PREM	E202947-11	26.0	34.6	0	Pass	
Dimethyl Phthalate	130		5.4	0.600	ug/l	1	PREM	E202947-11	160	197	0	Pass	
Fluoranthene	12		5.4	0.480	ug/l	1	PREM	E202947-11	13.8	15.8	0	Pass	
Fluorene	76		5.4	0.540	ug/l	1	PREM	E202947-11	90.3	103	50.9	Pass	
Hexachlorobenzene	25		5.4	0.550	ug/l	1	PREM	E202947-11	29.3	33.9	17.0	Pass	
Hexachlorobutadiene	ND<5.4	U	5.4	0.320	ug/l	1	PREM	E202947-11					
Hexachlorocyclopentadiene	81		5.4	0.250	ug/l	1	PREM	E202947-11	117	122	13.8	Pass	
Hexachloroethane	ND<5.4	U	5.4	0.270	ug/l	1	PREM	E202947-11					
Indeno(1,2,3-c,d)pyrene	ND<5.4	U	5.4	0.400	ug/l	1	PREM	E202947-11					
Isophorone	ND<5.4	U	5.4	0.440	ug/l	1	PREM	E202947-11					
Naphthalene	51		5.4	0.390	ug/l	1	PREM	E202947-11	64	72.6	29	Pass	
Nitrobenzene	ND<5.4	U	5.4	0.380	ug/l	1	PREM	E202947-11					
Pentachlorophenol	88		5.4	0.380	ug/l	1	PREM	E202947-11	111	133	49.6	Pass	
Phenanthrene	ND<5.4	U	5.4	0.560	ug/l	1	PREM	E202947-11					
Phenol	43		5.4	0.360	ug/l	1	PREM	E202947-11	117	127	0	Pass	
Pyrene	130		5.4	0.390	ug/l	1	PREM	E202947-11	142	167	71.2	Pass	
bis(2-Chloroethoxy) Methane	ND<5.4	U	5.4	0.460	ug/l	1	PREM	E202947-11					
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.4	U	5.4	0.350	ug/l	1	PREM	E202947-11					
bis(2-Chloroisopropyl) ether	ND<11	U	11	0.310	ug/l	1	PREM	E202947-11					
bis(2-Ethylhexyl) Phthalate	130		5.4	1.77	ug/l	1	PREM	E202947-11	129	161	48.1	Pass	

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di-n-Butyl Phthalate	110		5.4	1.14	ug/l	1	PREM	E202947-11	143	169	46.8	Pass
di-n-Octylphthalate	63		5.4	0.500	ug/l	1	PREM	E202947-11	65.6	82.6	26.2	Pass
n-Nitrosodi-n-Propylamine	ND<5.4	U	5.4	0.580	ug/l	1	PREM	E202947-11				
n-Nitrosodiphenylamine	ND<5.4	U	5.4	0.640	ug/l	1	PREM	E202947-11				

Location Identifier: WT-AC-03-116

Sample Identifier 2001961 02/26/2002 13:25 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	100		2.4	0.900	mg/L	6	PREM	E202947-12	78.9	98.6	47.3	FAIL

Location Identifier: WT-AC-03-117

Sample Identifier 2001962 02/26/2002 13:28 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	72		5.0	0.184	ug/l	1	PREM	E202947-13	65.4	79.0	49.5	Pass
1,1,2,2-Tetrachloroethane	30		5.0	0.243	ug/l	1	PREM	E202947-13	34.6	43.7	24.6	Pass
1,1,2-Trichloroethane	65		5.0	0.175	ug/l	1	PREM	E202947-13	74.4	89.0	58.4	Pass
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E202947-13				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E202947-13				
1,2-Dichloroethane	28		5.0	0.288	ug/l	1	PREM	E202947-13	26.8	33.2	21.6	Pass
1,2-Dichloropropane	110		5.0	0.234	ug/l	1	PREM	E202947-13	101	118	78.1	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E202947-13				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E202947-13				
Benzene	9.5		5.0	0.184	ug/l	1	PREM	E202947-13	7.93	9.82	6.22	Pass
Bromodichloromethane	22		5.0	0.172	ug/l	1	PREM	E202947-13	19.7	23.8	15.8	Pass
Bromoform	38		5.0	0.127	ug/l	1	PREM	E202947-13	39.6	49.5	30.3	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E202947-13				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E202947-13				
Carbon Tetrachloride	69		5.0	0.228	ug/l	1	PREM	E202947-13	55.3	70.7	41.5	Pass
Chlorobenzene	26		5.0	0.157	ug/l	1	PREM	E202947-13	24.8	29.2	20.2	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E202947-13				
Chloroform	42		5.0	0.226	ug/l	1	PREM	E202947-13	38.5	45.7	30.6	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E202947-13				
Dibromochloromethane	15		5.0	0.156	ug/l	1	PREM	E202947-13	15.1	18.3	11.6	Pass
Ethylbenzene	71		5.0	0.176	ug/l	1	PREM	E202947-13	70.2	84.4	54.2	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E202947-13				
Methyl Isobutyl ketone (4-Methyl-2-Penta	57		10	1.89	ug/l	1	PREM	E202947-13	73.1	99.3	44.9	Pass
Methylene Chloride	38		5.0	0.789	ug/l	1	PREM	E202947-13	34.7	43.8	26.3	Pass

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Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E202947-13				
Tetrachloroethylene (PCE)	68		5.0	0.171	ug/l	1	PREM	E202947-13	70.4	82.7	53.8	Pass
Toluene	31		5.0	0.188	ug/l	1	PREM	E202947-13	30.5	35.6	24.5	Pass
Trichloroethylene (TCE)	44		5.0	0.220	ug/l	1	PREM	E202947-13	34.6	41.1	26.2	FAIL
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E202947-13				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E202947-13				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E202947-13				
o-Xylene (1,2-Dimethylbenzene)	37		5.0	0.171	ug/l	1	PREM	E202947-13	38.2	48.3	26.6	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E202947-13				

Location Identifier: WT-AC-03-118

Sample Identifier 2002400 04/22/2002 12:50 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E204861-4				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E204861-4				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E204861-4				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E204861-4				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E204861-4				
PCB-1254 (Arochlor 1254)	2.7		0.41	0.120	ug/l	1	PREM	E204861-4	3.05	4.15	1.49	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E204861-4				

Location Identifier: WT-AC-03-119

Sample Identifier 2002414 05/22/2002 13:46 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205928-8				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205928-8				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205928-8				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205928-8				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205928-8				
PCB-1254 (Arochlor 1254)	5.1		0.40	0.120	ug/l	1	PREM	E205928-8	5.70	7.75	2.79	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205928-8				

Location Identifier: WT-AC-03-120

Sample Identifier 2002415 05/22/2002 13:48 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.098		0.010	0	mg/l	1	PREM	E205928-9	.103	.115	.0892	Pass

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Barium	0.16	0.010	0.000680 mg/L	1	PREM	E205928-9	.155	.172	.138	Pass
Cadmium	0.047	0.0020	0.000320 mg/L	1	PREM	E205928-9	.0502	.0543	.0443	Pass
Chromium, Total	0.088	0.010	0.000740 mg/L	1	PREM	E205928-9	.0872	.101	.0775	Pass
Copper	0.12	0.010	0.000870 mg/L	1	PREM	E205928-9	.118	.131	.107	Pass
Lead	0.15	0.0040	0.00175 mg/L	1	PREM	E205928-9	.153	.173	.137	Pass
Mercury	0.0019	0.00020	0.000022 mg/L	1	PREM	E205928-9	.00196	.00245	.00147	Pass
Nickel	0.24	0.010	0.00108 mg/L	1	PREM	E205928-9	.237	.262	.212	Pass
Selenium	0.22	0.010	0.00460 mg/L	1	PREM	E205928-9	.219	.259	.183	Pass
Silver	0.043	0.0020	0.00627 mg/L	1	PREM	E205928-9	.0447	.0520	.0380	Pass
Zinc	0.14	0.010	0.00198 mg/L	1	PREM	E205928-9	.144	.172	.126	Pass

Location Identifier: WT-AC-03-121

Sample Identifier 2002416 05/22/2002 13:52 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.72		0.020		mg/L	2	PREM	E205928-10	0.710	0.913	0.492	Pass

Location Identifier: WT-AC-03-122

Sample Identifier 2002417 05/22/2002 13:54 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	20		5.0	0.330	ug/l	1	PREM	E205928-11	24.1	27.8	10.9	Pass
1,2-Dichlorobenzene	64		5.0	0.400	ug/l	1	PREM	E205928-11	92.4	97.0	32.3	Pass
1,3-Dichlorobenzene	ND<5.0	U	5.0	0.310	ug/l	1	PREM	E205928-11				
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E205928-11				
2,4,5-Trichlorophenol	60		5.0	0.550	ug/l	1	PREM	E205928-11	75.6	85.0	42.2	Pass
2,4,6-Trichlorophenol	43		5.0	0.420	ug/l	1	PREM	E205928-11	53.5	61.5	27.2	Pass
2,4-Dichlorophenol	84		5.0	0.380	ug/l	1	PREM	E205928-11	118	126	59.1	Pass
2,4-Dimethylphenol	39		5.0	0.640	ug/l	1	PREM	E205928-11	51.3	58.6	18.8	Pass
2,4-Dinitrophenol	99		5.0	0.0700	ug/l	1	PREM	E205928-11	138	148	24.1	Pass
2,4-Dinitrotoluene	85		5.0	0.600	ug/l	1	PREM	E205928-11	105	124	59.2	Pass
2,6-Dinitrotoluene	ND<5.0	U	5.0	0.530	ug/l	1	PREM	E205928-11				
2-Chloronaphthalene	16		5.0	0.510	ug/l	1	PREM	E205928-11	18.5	22.9	9.85	Pass
2-Chlorophenol	47		5.0	0.400	ug/l	1	PREM	E205928-11	62.0	68.7	29.1	Pass
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E205928-11				
2-Methylphenol (o-Cresol)	21		5.0	0.420	ug/l	1	PREM	E205928-11	28.9	33.0	12.2	Pass
2-Nitroaniline	ND<10	U	10	0.550	ug/l	1	PREM	E205928-11				
2-Nitrophenol	14		5.0	0.420	ug/l	1	PREM	E205928-11	14.9	16.3	7.67	Pass
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E205928-11				

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3-Nitroaniline	ND<10	U	10	0.440	ug/l	1	PREM	E205928-11				
4,6-Dinitro-2-Methylphenol	140		5.0	0.300	ug/l	1	PREM	E205928-11	144	177	48.7	Pass
4-Bromophenyl Phenyl ether	80		5.0	0.530	ug/l	1	PREM	E205928-11	98.3	112	56.3	Pass
4-Chloro-3-Methylphenol	52		5.0	0.440	ug/l	1	PREM	E205928-11	66.4	75.4	35.1	Pass
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E205928-11				
4-Chlorophenyl Phenyl ether	68		5.0	0.540	ug/l	1	PREM	E205928-11	86.9	97.6	46.5	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E205928-11				
4-Nitrophenol	28		5.0	0.290	ug/l	1	PREM	E205928-11	64.6	73.9	0	Pass
Acenaphthene	ND<5.0	U	5.0	0.450	ug/l	1	PREM	E205928-11				
Acenaphthylene	16		5.0	0.470	ug/l	1	PREM	E205928-11	18.3	21.3	9.34	Pass
Anthracene	18		5.0	0.560	ug/l	1	PREM	E205928-11	20.6	23.3	11.2	Pass
Benzo(a)anthracene	22		5.0	0.420	ug/l	1	PREM	E205928-11	25.0	26.2	17.2	Pass
Benzo(a)pyrene	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E205928-11				
Benzo(b)fluoranthene	12		5.0	0.400	ug/l	1	PREM	E205928-11	15.1	17.9	8.61	Pass
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E205928-11				
Benzo(k)fluoranthene	ND<5.0	U	5.0	0.360	ug/l	1	PREM	E205928-11				
Benzyl Butyl Phthalate	85		5.0	0.460	ug/l	1	PREM	E205928-11	111	123	45.1	Pass
Carbazole	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E205928-11				
Chrysene	24		5.0	0.440	ug/l	1	PREM	E205928-11	25.3	28.8	16.0	Pass
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E205928-11				
Dibenz(a,h)anthracene	ND<5.0	U	5.0	0.370	ug/l	1	PREM	E205928-11				
Dibenzofuran	52		10	0.480	ug/l	1	PREM	E205928-11	64.9	70.1	34.9	Pass
Diethyl Phthalate	97		5.0	0.660	ug/l	1	PREM	E205928-11	142	169	51.5	Pass
Dimethyl Phthalate	12		5.0	0.600	ug/l	1	PREM	E205928-11	14.5	17.1	5.54	Pass
Fluoranthene	18		5.0	0.480	ug/l	1	PREM	E205928-11	19.8	22.7	13.6	Pass
Fluorene	35		5.0	0.540	ug/l	1	PREM	E205928-11	39.4	45.6	22.5	Pass
Hexachlorobenzene	ND<5.0	U	5.0	0.550	ug/l	1	PREM	E205928-11				
Hexachlorobutadiene	ND<5.0	U	5.0	0.320	ug/l	1	PREM	E205928-11				
Hexachlorocyclopentadiene	ND<5.0	U	5.0	0.250	ug/l	1	PREM	E205928-11				
Hexachloroethane	ND<5.0	U	5.0	0.270	ug/l	1	PREM	E205928-11				
Indeno(1,2,3-c,d)pyrene	15		5.0	0.400	ug/l	1	PREM	E205928-11	20.0	21.0	9.27	Pass
Isophorone	51		5.0	0.440	ug/l	1	PREM	E205928-11	58.1	67.3	31.0	Pass
Naphthalene	110		5.0	0.390	ug/l	1	PREM	E205928-11	139	156	58.2	Pass
Nitrobenzene	73		5.0	0.380	ug/l	1	PREM	E205928-11	98.0	112	48.1	Pass
Pentachlorophenol	65		5.0	0.380	ug/l	1	PREM	E205928-11	78.0	92.9	33.3	Pass
Phenanthrene	23		5.0	0.560	ug/l	1	PREM	E205928-11	24.4	27.3	14.5	Pass
Phenol	52		5.0	0.360	ug/l	1	PREM	E205928-11	134	145	29.7	Pass
Pyrene	28		5.0	0.390	ug/l	1	PREM	E205928-11	30.2	39.3	15.6	Pass
bis(2-Chloroethoxy) Methane	73		5.0	0.460	ug/l	1	PREM	E205928-11	118	124	62.2	Pass
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E205928-11				

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bis(2-Chloroisopropyl) ether	ND<10	U	10	0.310	ug/l	1	PREM	E205928-11					
bis(2-Ethylhexyl) Phthalate	27		5.0	1.77	ug/l	1	PREM	E205928-11	20.9	27	14.1		
di-n-Butyl Phthalate	ND<5.0	U	5.0	1.14	ug/l	1	PREM	E205928-11					
di-n-Octylphthalate	55		5.0	0.500	ug/l	1	PREM	E205928-11	61.1	77.2	24.7	Pass	
n-Nitrosodi-n-Propylamine	ND<5.0	U	5.0	0.580	ug/l	1	PREM	E205928-11					
n-Nitrosodiphenylamine	35		5.0	0.640	ug/l	1	PREM	E205928-11	49.7	60.1	21.0	Pass	

Location Identifier: WT-AC-03-123

Sample Identifier 2002418 05/22/2002 13:56 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	91		6.0	2.25	mg/L	15	PREM	E205928-12	94.8	119	56.9	Pass

Location Identifier: WT-AC-03-124

Sample Identifier 2002419 05/22/2002 13:58 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	48		5.0	0.184	ug/l	1	PREM	E205928-13	39.6	48	30.1	FALSE POSITIVE
1,1,2,2-Tetrachloroethane	120		5.0	0.243	ug/l	1	PREM	E205928-13	133	168	96.2	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E205928-13				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E205928-13				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E205928-13				
1,2-Dichloroethane	74		5.0	0.288	ug/l	1	PREM	E205928-13	73.8	90.0	58.7	Pass
1,2-Dichloropropane	66		5.0	0.234	ug/l	1	PREM	E205928-13	64.5	75.5	50.3	Pass
2-Hexanone	ND<10	U	10	1.88	ug/l	1	PREM	E205928-13				
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E205928-13				
Benzene	35		5.0	0.184	ug/l	1	PREM	E205928-13	30.1	36.1	24.4	Pass
Bromodichloromethane	65		5.0	0.172	ug/l	1	PREM	E205928-13	55.3	66.5	44.7	Pass
Bromoform	59		5.0	0.127	ug/l	1	PREM	E205928-13	66.4	82.9	51.5	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E205928-13				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E205928-13				
Carbon Tetrachloride	41		5.0	0.228	ug/l	1	PREM	E205928-13	339.9	43.4	25.5	Pass
Chlorobenzene	14		5.0	0.157	ug/l	1	PREM	E205928-13	14.4	16.9	12.0	Pass
Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E205928-13				
Chloroform	16		5.0	0.226	ug/l	1	PREM	E205928-13	13.8	16.6	11.2	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E205928-13				
Dibromochloromethane	43		5.0	0.156	ug/l	1	PREM	E205928-13	43.5	52.9	33.6	Pass
Ethylbenzene	28		5.0	0.176	ug/l	1	PREM	E205928-13	27.1	32.4	21.1	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E205928-13				

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Methyl Isobutyl ketone (4-Methyl-2-Penta	54		10	1.89	ug/l	1	PREM	E205928-13	59.8	75.9	35.1	Pass
Methylene Chloride	30		5.0	0.789	ug/l	1	PREM	E205928-13	27.8	35.2	21.1	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E205928-13				
Tetrachloroethylene (PCE)	47		5.0	0.171	ug/l	1	PREM	E205928-13	50.3	59.3	38.5	Pass
Toluene	39		5.0	0.188	ug/l	1	PREM	E205928-13	40.2	46.7	32.4	Pass
Trichloroethylene (TCE)	25		5.0	0.220	ug/l	1	PREM	E205928-13	24.8	29.5	18.9	Pass
Vinyl Chloride	ND<5.0	U	5.0	0.111	ug/l	1	PREM	E205928-13				
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E205928-13				
m,p-Xylene (Sum of Isomers)	ND<5.0	U	5.0	0.424	ug/l	1	PREM	E205928-13				
o-Xylene (1,2-Dimethylbenzene)	ND<5.0	U	5.0	0.171	ug/l	1	PREM	E205928-13				
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E205928-13				

Location Identifier: WT-AC-03-125

Sample Identifier 2002458 05/30/2002 12:45 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C16-5				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C16-5				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C16-5				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C16-5				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C16-5				
PCB-1254 (Arochlor 1254)	6.1		0.40	0.120	ug/l	1	PREM	E205C16-5	7.33	9.97	3.59	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C16-5				

Location Identifier: WT-AC-03-126

Sample Identifier 2002491 05/30/2002 18:00 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C82-10				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C82-10				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C82-10				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C82-10				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C82-10				
PCB-1254 (Arochlor 1254)	4.8		0.40	0.120	ug/l	1	PREM	E205C82-10	5.04	6.85	2.47	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E205C82-10				

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Location Identifier: WT-AC-03-127

Sample Identifier 2002492 05/30/2002 18:03 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.20		0.010	0	mg/L	1	PREM	E205C82-11	0.189	.216	.162	Pass
Barium	0.42		0.010	0.000680	mg/L	1	PREM	E205C82-11	.405	.448	.362	Pass
Cadmium	0.041		0.0020	0.000320	mg/L	1	PREM	E205C82-11	0.0424	0.0473	0.0375	Pass
Chromium, Total	0.21		0.010	0.000740	mg/L	1	PREM	E205C82-11	0.194	0.215	0.173	Pass
Copper	0.14		0.010	0.000870	mg/L	1	PREM	E205C82-11	0.130	0.145	0.115	Pass
Lead	0.27		0.0040	0.00175	mg/L	1	PREM	E205C82-11	0.261	0.293	0.229	Pass
Mercury	0.0025		0.00020	0.000022	mg/L	1	PREM	E205C82-11	0.00283	0.00354	0.00212	Pass
Nickel	0.16		0.010	0.00108	mg/L	1	PREM	E205C82-11	0.153	0.169	0.137	Pass
Selenium	0.23		0.010	0.00460	mg/L	1	PREM	E205C82-11	0.231	0.265	0.197	Pass
Silver	0.31		0.0020	0.00627	mg/L	1	PREM	E205C82-11	0.308	0.345	0.271	Pass
Zinc	0.12		0.010	0.00198	mg/L	1	PREM	E205C82-11	0.114	.128	0.0998	Pass

Location Identifier: WT-AC-03-128

Sample Identifier 2002493 05/30/2002 18:05 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Cyanide	0.75		0.020		mg/L	2	PREM	E205C82-12	0.722	0.917	0.500	Pass

Location Identifier: WT-AC-03-129

Sample Identifier 2002494 05/30/2002 18:07 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,2,4-Trichlorobenzene	57		5.0	0.330	ug/l	1	PREM	E205C82-13				FALSE POSITIVE
1,2-Dichlorobenzene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E205C82-13				
1,3-Dichlorobenzene	ND<5.0	U	5.0	0.310	ug/l	1	PREM	E205C82-13				
1,4-Dichlorobenzene	ND<5.0	U	5.0	0.300	ug/l	1	PREM	E205C82-13				
2,4,5-Trichlorophenol	74		5.0	0.550	ug/l	1	PREM	E205C82-13	112	126	59.2	Pass
2,4,6-Trichlorophenol	92		5.0	0.420	ug/l	1	PREM	E205C82-13	146	169	71.7	Pass
2,4-Dichlorophenol	130		5.0	0.380	ug/l	1	PREM	E205C82-13	189	199	94.3	Pass
2,4-Dimethylphenol	76		5.0	0.640	ug/l	1	PREM	E205C82-13	123	139	49.0	Pass
2,4-Dinitrophenol	97		5.0	0.0700	ug/l	1	PREM	E205C82-13	184	191	30.1	Pass
2,4-Dinitrotoluene	29		5.0	0.600	ug/l	1	PREM	E205C82-13	45.5	51.2	21.7	Pass
2,6-Dinitrotoluene	66		5.0	0.530	ug/l	1	PREM	E205C82-13	98.2	112	50.7	Pass
2-Chloronaphthalene	17		5.0	0.510	ug/l	1	PREM	E205C82-13	30.3	33.8	12.0	Pass

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2-Chlorophenol	55		5.0	0.400	ug/l	1	PREM	E205C82-13	87.2	96.0	39.9	Pass
2-Methylnaphthalene	ND<5.0	U	5.0	0.430	ug/l	1	PREM	E205C82-13				
2-Methylphenol (o-Cresol)	19		5.0	0.420	ug/l	1	PREM	E205C82-13	30.4	36.5	10.5	Pass
2-Nitroaniline	ND<10	U	10	0.550	ug/l	1	PREM	E205C82-13				
2-Nitrophenol	18		5.0	0.420	ug/l	1	PREM	E205C82-13	28.7	32.2	14.0	Pass
3,3'-Dichlorobenzidine	ND<5.0	U	5.0	0.730	ug/l	1	PREM	E205C82-13				
3-Nitroaniline	ND<10	U	10	0.440	ug/l	1	PREM	E205C82-13				
4,6-Dinitro-2-Methylphenol	38		5.0	0.300	ug/l	1	PREM	E205C82-13	60.2	65.9	26.3	Pass
4-Bromophenyl Phenyl ether	ND<5.0	U	5.0	0.530	ug/l	1	PREM	E205C82-13				
4-Chloro-3-Methylphenol	100		5.0	0.440	ug/l	1	PREM	E205C82-13	158	180	85.7	Pass
4-Chloroaniline	ND<10	U	10	0.410	ug/l	1	PREM	E205C82-13				
4-Chlorophenyl Phenyl ether	55		5.0	0.540	ug/l	1	PREM	E205C82-13	82.5	95.7	39.3	Pass
4-Nitroaniline	ND<10	U	10	0.480	ug/l	1	PREM	E205C82-13				
4-Nitrophenol	ND<5.0	U	5.0	0.290	ug/l	1	PREM	E205C82-13				
Acenaphthene	24		5.0	0.450	ug/l	1	PREM	E205C82-13	38.1	42.9	17.7	Pass
Acenaphthylene	ND<5.0	U	5.0	0.470	ug/l	1	PREM	E205C82-13				
Anthracene	40		5.0	0.560	ug/l	1	PREM	E205C82-13	60.8	71.1	31.4	Pass
Benzo(a)anthracene	43		5.0	0.420	ug/l	1	PREM	E205C82-13	65.2	77.0	34.8	Pass
Benzo(a)pyrene	21		5.0	0.350	ug/l	1	PREM	E205C82-13	32.9	40.4	14.6	Pass
Benzo(b)fluoranthene	24		5.0	0.400	ug/l	1	PREM	E205C82-13	37.9	47.4	17.6	Pass
Benzo(g,h,i)perylene	ND<5.0	U	5.0	0.420	ug/l	1	PREM	E205C82-13				
Benzo(k)fluoranthene	32		5.0	0.360	ug/l	1	PREM	E205C82-13	48.4	62.4	22.0	Pass
Benzyl Butyl Phthalate	78		5.0	0.460	ug/l	1	PREM	E205C82-13	119	146	47.7	Pass
Carbazole	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E205C82-13				
Chrysene	ND<5.0	U	5.0	0.440	ug/l	1	PREM	E205C82-13				
Cresol,m- & p-	ND<5.0	U	5.0	0.740	ug/l	1	PREM	E205C82-13				
Dibenz(a,h)anthracene	ND<5.0	U	5.0	0.370	ug/l	1	PREM	E205C82-13				
Dibenzofuran	ND<10	U	10	0.480	ug/l	1	PREM	E205C82-13				
Diethyl Phthalate	120		5.0	0.660	ug/l	1	PREM	E205C82-13	168	210	49.7	Pass
Dimethyl Phthalate	54		5.0	0.600	ug/l	1	PREM	E205C82-13	82.2	109	0	Pass
Fluoranthene	ND<5.0	U	5.0	0.480	ug/l	1	PREM	E205C82-13				
Fluorene	ND<5.0	U	5.0	0.540	ug/l	1	PREM	E205C82-13				
Hexachlorobenzene	67		5.0	0.550	ug/l	1	PREM	E205C82-13	108	124	54.4	Pass
Hexachlorobutadiene	27		5.0	0.320	ug/l	1	PREM	E205C82-13	47.4	54.7	0	Pass
Hexachlorocyclopentadiene	43		5.0	0.250	ug/l	1	PREM	E205C82-13	83.0	103	0	Pass
Hexachloroethane	33		5.0	0.270	ug/l	1	PREM	E205C82-13	56.0	63.8	0	Pass
Indeno(1,2,3-c,d)pyrene	ND<5.0	U	5.0	0.400	ug/l	1	PREM	E205C82-13				
Isophorone	74		5.0	0.440	ug/l	1	PREM	E205C82-13	112	133	53.6	Pass
Naphthalene	52		5.0	0.390	ug/l	1	PREM	E205C82-13	84.5	91.9	30.3	Pass
Nitrobenzene	24		5.0	0.380	ug/l	1	PREM	E205C82-13	33.4	38.4	0	Pass

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Pentachlorophenol	32		5.0	0.380	ug/l	1	PREM	E205C82-13	67.4	80.1	28.1	Pass
Phenanthrene	60		5.0	0.560	ug/l	1	PREM	E205C82-13	88.0	146.4	0	Pass
Phenol	24		5.0	0.360	ug/l	1	PREM	E205C82-13	63.4	70.0	0	Pass
Pyrene	19		5.0	0.390	ug/l	1	PREM	E205C82-13	28.2	43.1	0	Pass
bis(2-Chloroethoxy) Methane	ND<5.0	U	5.0	0.460	ug/l	1	PREM	E205C82-13				
bis(2-Chloroethyl) ether (2-Chloroethyl	ND<5.0	U	5.0	0.350	ug/l	1	PREM	E205C82-13				
bis(2-Chloroisopropyl) ether	27		10	0.310	ug/l	1	PREM	E205C82-13	42.2	52.9	9.19	Pass
bis(2-Ethylhexyl) Phthalate	47		5.0	1.77	ug/l	1	PREM	E205C82-13	69.7	88.4	32.1	Pass
di-n-Butyl Phthalate	73		5.0	1.14	ug/l	1	PREM	E205C82-13	110	135	49.5	Pass
di-n-Octylphthalate	54		5.0	0.500	ug/l	1	PREM	E205C82-13	76.2	105	32.1	Pass
n-Nitrosodi-n-Propylamine	49		5.0	0.580	ug/l	1	PREM	E205C82-13	70.7	84.9	28.1	Pass
n-Nitrosodiphenylamine	ND<5.0	U	5.0	0.640	ug/l	1	PREM	E205C82-13				

Location Identifier: WT-AC-03-130

Sample Identifier 2002495 05/30/2002 18:09 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Total Petroleum Hydrocarbons EPA 418.1	72		4.0	1.50	mg/L	10	PREM	E205C82-14	78.9	98.6	47.3	Pass

Location Identifier: WT-AC-03-131

Sample Identifier 2002496 05/30/2002 18:12 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
1,1,1-Trichloroethane	30		5.0	0.184	ug/l	1	PREM	E205C82-15	25.8	31.5	18.1	Pass
1,1,2,2-Tetrachloroethane	38		5.0	0.243	ug/l	1	PREM	E205C82-15	37.1	49.5	26.1	Pass
1,1,2-Trichloroethane	ND<5.0	U	5.0	0.175	ug/l	1	PREM	E205C82-15				
1,1-Dichloroethane	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E205C82-15				
1,1-Dichloroethene	ND<5.0	U	5.0	0.274	ug/l	1	PREM	E205C82-15				
1,2-Dichloroethane	56		5.0	0.288	ug/l	1	PREM	E205C82-15	55.9	70.5	42.1	Pass
1,2-Dichloropropane	92		5.0	0.234	ug/l	1	PREM	E205C82-15	93.1	114	69.9	Pass
2-Hexanone	28		10	1.88	ug/l	1	PREM	E205C82-15	31.9	43.6	17.5	Pass
Acetone	ND<20	U	20	2.65	ug/l	1	PREM	E205C82-15				
Benzene	54		5.0	0.184	ug/l	1	PREM	E205C82-15	51.7	62.9	39.1	Pass
Bromodichloromethane	40		5.0	0.172	ug/l	1	PREM	E205C82-15	37.9	48.5	29.4	Pass
Bromoform	42		5.0	0.127	ug/l	1	PREM	E205C82-15	41.9	54.6	30.0	Pass
Bromomethane	ND<5.0	U	5.0	0.167	ug/l	1	PREM	E205C82-15				
Carbon Disulfide	ND<5.0	U	5.0	0.498	ug/l	1	PREM	E205C82-15				
Carbon Tetrachloride	ND<5.0	U	5.0	0.228	ug/l	1	PREM	E205C82-15				
Chlorobenzene	ND<5.0	U	5.0	0.157	ug/l	1	PREM	E205C82-15				

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Chloroethane	ND<5.0	U	5.0	0.525	ug/l	1	PREM	E205C82-15				
Chloroform	33		5.0	0.226	ug/l	1	PREM	E205C82-15	29.6	36.6	22.3	Pass
Chloromethane	ND<5.0	U	5.0	0.148	ug/l	1	PREM	E205C82-15				
Dibromochloromethane	38		5.0	0.156	ug/l	1	PREM	E205C82-15	39.3	49.2	29.6	Pass
Ethylbenzene	32		5.0	0.176	ug/l	1	PREM	E205C82-15	30.1	36.8	22.0	Pass
Methyl Ethyl ketone (2-Butanone)	ND<10	U	10	1.94	ug/l	1	PREM	E205C82-15				
Methyl Isobutyl ketone (4-Methyl-2-Penta	ND<10	U	10	1.89	ug/l	1	PREM	E205C82-15				
Methylene Chloride	18		5.0	0.789	ug/l	1	PREM	E205C82-15	24.3	31.5	16.4	Pass
Styrene	ND<5.0	U	5.0	0.170	ug/l	1	PREM	E205C82-15				
Tetrachloroethylene (PCE)	18		5.0	0.171	ug/l	1	PREM	E205C82-15	20.1	23.9	12.9	Pass
Toluene	41		5.0	0.188	ug/l	1	PREM	E205C82-15	40.2	48.3	30.3	Pass
Trichloroethylene (TCE)	25		5.0	0.220	ug/l	1	PREM	E205C82-15	25.7	31.4	18.2	Pass
Vinyl Chloride	50		5.0	0.111	ug/l	1	PREM	E205C82-15	40.0	60.5	20.5	Pass
cis-1,3-Dichloropropene	ND<5.0	U	5.0	0.139	ug/l	1	PREM	E205C82-15				
m,p-Xylene (Sum of Isomers)	49		5.0	0.424	ug/l	1	PREM	E205C82-15	46.2	57.7	32.2	Pass
o-Xylene (1,2-Dimethylbenzene)	56		5.0	0.171	ug/l	1	PREM	E205C82-15	53.1	66.3	37.0	Pass
trans-1,3-Dichloropropene	ND<5.0	U	5.0	0.0680	ug/l	1	PREM	E205C82-15				

Location Identifier: WT-AC-03-132

Sample Identifier 2002506 06/10/2002 14:35 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206410-4				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206410-4				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206410-4				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206410-4				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206410-4				
PCB-1254 (Arochlor 1254)	2.4		0.40	0.120	ug/l	1	PREM	E206410-4	2.24	3.05	1.10	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206410-4				

Location Identifier: WT-AC-03-133

Sample Identifier 2002513 06/13/2002 11:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206656-6				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206656-6				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206656-6				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206656-6				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206656-6				

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PCB-1254 (Arochlor 1254)	3.9		0.41	0.120	ug/l	1	PREM	E206656-6	3.56	4.84	1.74	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206656-6				

Location Identifier: WT-AC-03-134

Sample Identifier 2002518 06/13/2002 11:20 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206651-5				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206651-5				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206651-5				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206651-5				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206651-5				
PCB-1254 (Arochlor 1254)	5.9		0.41	0.120	ug/l	1	PREM	E206651-5	5.90	8.91	2.89	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E206651-5				

Location Identifier: WT-AC-03-135

Sample Identifier 2002520 06/13/2002 12:20 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206645-2				
PCB-1221 (Arochlor 1221)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206645-2				
PCB-1232 (Arochlor 1232)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206645-2				
PCB-1242 (Arochlor 1242)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206645-2				
PCB-1248 (Arochlor 1248)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206645-2				
PCB-1254 (Arochlor 1254)	8.1		0.40	0.120	ug/l	1	PREM	E206645-2	8.47	11.5	4.15	Pass
PCB-1260 (Arochlor 1260)	ND<0.40	U	0.40	0.120	ug/l	1	PREM	E206645-2				

Location Identifier: WT-AC-03-154

Sample Identifier 2001904 02/15/2002 13:40 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
PCB-1016 (Arochlor 1016)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202576-10				
PCB-1221 (Arochlor 1221)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202576-10				
PCB-1232 (Arochlor 1232)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202576-10				
PCB-1242 (Arochlor 1242)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202576-10				
PCB-1248 (Arochlor 1248)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202576-10				
PCB-1254 (Arochlor 1254)	2.3		0.41	0.120	ug/l	1	PREM	E202576-10	2.34	3.09	1.20	Pass
PCB-1260 (Arochlor 1260)	ND<0.41	U	0.41	0.120	ug/l	1	PREM	E202576-10				

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Location Identifier: WT-AC-08-083

Sample Identifier 2001799 01/29/2002 13:10 Performance Evaluation - Water

Chemical Name	Reported Concentration	Qualifiers	R.L.	M.D.L.	Units	Dil.	Lab.	Lab. Number	Reference	Upper Limit	Lower Limit	Result
Arsenic	0.14		0.010	0	mg/L	1	PREM	E201A46-13	.151	.173	.130	Pass
Barium	0.34		0.010	0.000680	mg/L	1	PREM	E201A46-13	.324	.358	.290	Pass
Cadmium	0.031		0.0020	0.000320	mg/L	1	PREM	E201A46-13	.0339	.0378	.0300	Pass
Chromium, Total	0.15		0.010	0.000740	mg/L	1	PREM	E201A46-13	.155	.172	.138	Pass
Copper	0.10		0.010	0.000870	mg/L	1	PREM	E201A46-13	.104	.116	.092	Pass
Lead	0.20		0.0040	0.00175	mg/L	1	PREM	E201A46-13	.209	.234	.183	Pass
Mercury	0.0021		0.00020	0.000022	mg/L	1	PREM	E201A46-13	.00226	.00283	.00170	Pass
Nickel	0.12		0.010	0.00108	mg/L	1	PREM	E201A46-13	.122	.135	.110	Pass
Selenium	0.18		0.010	0.00460	mg/L	1	PREM	E201A46-13	.185	.212	.158	Pass
Silver	0.24		0.0020	0.00627	mg/L	1	PREM	E201A46-13	.246	.276	.217	Pass
Zinc	0.090		0.010	0.00198	mg/L	1	PREM	E201A46-13	.0912	.102	.0798	Pass

Appendix B

Upper Willow Brook Pond Confirmatory Analytical Results and Data Validation Reports

The following reports are partial reports and do not include the referenced tables confirmatory analytical results as indicated. This information will be provided under separate cover upon request.





Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 04/24/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 04/11/02

A Tier II data validation was performed on data for eight soil samples collected on April 11, 2002 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-071 through WT-CS-02-077. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

One sample (2002381) was analyzed for Arsenic. A Tier II validation was performed on this sample. The sample was analyzed by USEPA SW846 Method 6010B, Trace Metals by ICP.

PCB Data Validation

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported this sample under Project 88UT002-103. The internal laboratory lot number for the PCB analyses is E204529 (batch 14519).

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional

Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB Data Validation

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 2.5°C, which was within the acceptance limit of 4°C +/- 2°C. No qualification is applied based on sample temperature due to the logistics of the sample transport process. Samples were collected at ambient temperature, placed in a cooler on ice and immediately transferred to the courier. The trip from the Site to the laboratory is generally completed in approximately one hour.

Agreement with the Chain of Custody

The sample was shipped to Premier Laboratory under chain of custody on 04/11/02. The laboratory received the sample on 04/11/02. The sample was analyzed for PCBs by SW846 Method 8082. Validation of PCBs is discussed in this report. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria could not be evaluated for percent recovery (%R) for both surrogates in the field samples 2002382 and 2002383, because the surrogates were diluted out due to elevated sample concentrations. Surrogates were within acceptance limits for other QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002381. Aroclor 1254 was spiked into the MS and MSD samples. All data were within acceptance limits for %R and RPD in the matrix spike / matrix spike duplicate sample.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS sample.

Field Duplicate

Samples 2002377 and 2002384 were submitted as a field duplicate pair. The results for Aroclor 1254 were 200 ug/kg and 180 ug/kg. The RPD is 11%, which represents acceptable field duplicate precision for soil samples.

Arsenic Data Validation

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--|-----------------------------|
| ▪ Performance Evaluation Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Technical Holding Times | ▪ Laboratory Duplicates |
| ▪ Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Blanks | ▪ Serial Dilution Results |
| ▪ ICP Interference Check Sample | ▪ Detection Limit Results |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set.

Preservation and Holding Times

The sample was properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses. No detects were reported in the method blank.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the

sample matrix on the digestion and measurement methodology.

All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate was not submitted with this data set. Field duplicates are submitted at a frequency of one per twenty samples and are tracked on an on-going basis.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

The %R for arsenic was within acceptance limits for the LCS for arsenic.

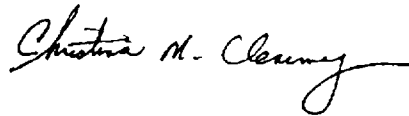
OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should

use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified for PCBs or arsenic. All results were accepted as reported.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 04/18/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 04/11/02

A Tier II data validation was performed on data for four soil samples collected on April 11, 2002 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-01-001 through WT-CS-01-004. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The sample was submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported this sample under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E204503 (batch 14455).

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 7°C, which was not within the acceptance limit of 4°C +/- 2°C. No qualification is applied based on sample temperature due to the logistics of the sample transport process. Samples were collected at ambient temperature, placed in a cooler on ice and immediately transferred to the courier. The trip from the

Site to the laboratory is generally completed in approximately one hour.

Agreement with the Chain of Custody

The sample was shipped to Premier Laboratory under chain of custody on 04/11/02. The laboratory received the sample on 04/11/02. The sample was analyzed for PCBs by SW846 Method 8082. Validation of PCBs is discussed in this report. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are

assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria could not be evaluated for percent recovery (%R) for both surrogates in the field sample 2002373, because the surrogates were diluted out due to elevated sample concentrations. Surrogates were within acceptance limits for other QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002372. Aroclor 1254 was spiked into the MS and MSD samples. All data were qualified as Estimated (J) due to a high RPD in the matrix spike / matrix spike duplicate sample.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS sample.

Field Duplicate

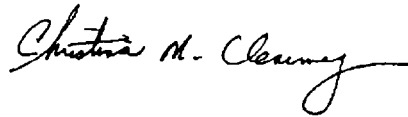
A field duplicate pair was not submitted with this data set.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Aroclor 1254 was estimated in sample 2002372 due to a high RPD in the MS/MSD analyses. It should be noted that surrogates could not be evaluated in sample 2002373 in this data set due to elevated sample concentrations.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 04/22/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 04/11/02

A Tier II data validation was performed on data for four soil samples collected on April 11, 2002 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. A trip blank (2002376) was included with the sample delivery group. The samples discussed in this validation memorandum were analyzed for VOCs by SW846 Method 8260B, SVOCs by SW846 Method 8270C, TPH by USEPA 418.1, Metals by SW846 Method 6010B and Cyanide by SW846 Method 9012. These parameters are herein referred to as the "other parameters." Validation for the samples submitted for PCBs by SW846 Method 8082 are presented in a separate validation report.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E204503.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for

validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG), Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |

- Initial and Continuing Calibration
- Practical Quantitation Limits
- Blanks
- Tentatively Identified compounds

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on April 11, 2002. The laboratory received the samples April 11, 2002. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted.

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 7.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2002376) and the method blank were evaluated for contamination for VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs. No qualifications were made on the unspiked sample.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002372. All data were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 7.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

The method blank was evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All SVOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002372. Bis(2-chloroisoethoxy)methane, bis(2-chloroisopropyl)ether, bis(2-chloroisoethyl)ether, 2-chlorophenol, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2,4-dimethylphenol, hexachloroethane 2-methylphenol, nitrobenzene, and 2-nitrophenol were outside the QC RPD acceptance limits. Results in the unspiked sample were qualified

accordingly. Refer to attached validation tables for details of qualification decisions.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control samples.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--|-------------------------------------|
| ▪ Performance Evaluation Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Technical Holding Times | ▪ Laboratory Duplicates |
| ▪ Calibration Verification | ▪ Furnace AA / Post Digestion Spike |
| ▪ Blanks | ▪ Laboratory Control Sample |
| | ▪ Serial Dilution Results |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2002372. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate pair was not submitted with this data set.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data were within the QC acceptance criteria for LCS percent recovery (%R). All

affected data were qualified accordingly.

ICP Interference Check Sample

All results were within QC acceptance limits for % recovery for the ICP Interference Check sample.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH) and Cyanide. There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|---------------------------------------|-----------------------------|
| ▪ Performance Evaluation Sample Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Holding Time | ▪ Laboratory Duplicates |
| ▪ Initial Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Continuing Calibration Verification | ▪ Detection Limit Results |
| ▪ Blanks | |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples analyzed for TPH and cyanide were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibrations were analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve for TPH was greater than 0.9950. The %RSD was less than 20%. All initial calibration QC acceptance criteria were met for Cyanide.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %D was below 15% for the continuing calibration analyses for TPH. All QC acceptance criteria were met for continuing calibrations for cyanide.

Blanks

No detects were reported in the associated method blanks for TPH and cyanide. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was performed on sample 2002372. All data were within QC acceptance limits for TPH and cyanide.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

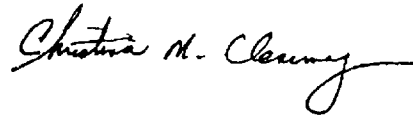
All QC acceptance criteria were met for LCS for TPH and cyanide.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Some SVOC data were qualified based on high RPD in the MS/MSD results.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 04/12/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 04/09/02

A Tier II data validation was performed on data for five soil samples collected on April 09, 2002 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-065 through WT-CS-02070. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The sample was submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported this sample under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E204450 (batch 14416).

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 4°C, which was within the acceptance limit of 4°C +/- 2°C. No qualification is applied based on sample temperature due to the logistics of the sample transport process. Samples were collected at ambient temperature, placed in a cooler on ice and immediately transferred to the courier. The trip from the Site to

the laboratory is generally completed in approximately one hour.

Agreement with the Chain of Custody

The sample was shipped to Premier Laboratory under chain of custody on 04/09/02. The laboratory received the sample on 04/10/02. The sample was analyzed for PCBs by SW846 Method 8082. Validation of PCBs is discussed in this report. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are

assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria could not be evaluated for percent recovery (%R) for both surrogates in all of the following field samples: 2002367, 2002368, 2002369, and 2002370 and for the MS and MSD analyses because the surrogates were diluted out due to elevated sample concentrations. Surrogates were within acceptance limits for other QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002367. Aroclor 1254 was spiked into the MS and MSD samples. Percent recovery and relative percent difference were not evaluated since the unspiked sample required a 50X dilution. All data were accepted as reported in the unspiked sample.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS sample.

Field Duplicate

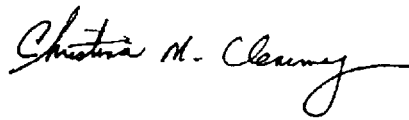
A field duplicate pair was not submitted with this data set.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified. It should be noted that surrogates could not be evaluated in several samples in this data set due to elevated sample concentrations. It should also be noted that the MS/MSD could not be evaluated for the same reason.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 04/19/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 04/09/02

A Tier II data validation was performed on data for two soil samples collected on April 9, 2002 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. A trip blank (2002371) was included with the sample delivery group. The samples discussed in this validation memorandum were analyzed for VOCs by SW846 Method 8260B, SVOCs by SW846 Method 8270C, TPH by USEPA 418.1, Metals by SW846 Method 6010B and Cyanide by SW846 Method 9012. These parameters are herein referred to as the "other parameters." Validation for the samples submitted for PCBs by SW846 Method 8082 are presented in a separate validation report.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E204450.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for

validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG), Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |

- Initial and Continuing Calibration
- Practical Quantitation Limits
- Blanks
- Tentatively Identified compounds

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on April 9, 2002. The laboratory received the samples April 9, 2002. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted.

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperatures recorded by the laboratory were 4.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2002371) and the method blank were evaluated for contamination for VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs. No qualifications were made on the unspiked sample.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002368. All data were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperatures recorded by the laboratory were 4.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

The method blank was evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All SVOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2002368. Benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-chloroisopropyl)ether, bis(2-chloroisoethyl)ether, benzo(g,h,i)perylene, di-n-octyl phthalate, 2,4-dinitrotoluene, 4-chloroaniline, 3,3-dichlorobenzidine, flourene, 4-nitrophenol, hexachlorocyclopentadiene, 2-methyl-4,6-dinitrophenol, 3-nitroaniline, and 4-nitroaniline, were outside QC % recovery and

RPD acceptance limits. Results in the unspiked sample were qualified accordingly. Refer to attached validation tables for details of qualification decisions.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control samples.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--|-------------------------------------|
| ▪ Performance Evaluation Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Technical Holding Times | ▪ Laboratory Duplicates |
| | ▪ Furnace AA / Post Digestion Spike |
| ▪ Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Blanks | ▪ Serial Dilution Results |

- ICP Interference Check Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2002368. Mercury, barium, chromium, copper, lead, nickel, and zinc were outside QC % recovery and/or RPD acceptance limits. Results in the affected samples were qualified accordingly. Refer to attached validation tables for details of qualification decisions.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate pair was not submitted with this data set.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data were within the QC acceptance criteria for LCS percent recovery (%R), with the exception of lead (76.6%) and selenium (66.4%), which were outside the QC acceptance limits (80-120%). All affected data were qualified accordingly. Refer to attached validation tables for details of qualification decisions.

ICP Interference Check Sample

All results were within QC acceptance limits for % recovery for the ICP Interference Check sample.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH) and Cyanide. There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|---------------------------------------|-----------------------------|
| ▪ Performance Evaluation Sample Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Holding Time | ▪ Laboratory Duplicates |
| ▪ Initial Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Continuing Calibration Verification | ▪ Detection Limit Results |
| ▪ Blanks | |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples analyzed for TPH and cyanide were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibrations were analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve for TPH was greater than 0.9950. The %RSD was less than 20%. All initial calibration QC acceptance criteria were met for Cyanide.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %D was below 15% for the continuing calibration analyses for TPH. All QC acceptance criteria were met for continuing calibrations for cyanide.

Blanks

No detects were reported in the associated method blanks for TPH and cyanide. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was performed on sample 2002368. All data were within QC acceptance limits for cyanide. TPH was qualified based on high MS/MSD % recovery. Refer to attached validation tables for details of qualification decisions.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

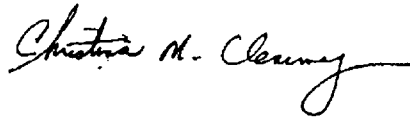
All QC acceptance criteria were met for LCS for TPH. Cyanide (123.0%) was not within the QC acceptance limits (80-120%). Refer to attached validation tables for details of qualification decisions

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Some SVOC and Metal data were qualified based on high / low % recovery, and / or high RPD in the MS/MSD results. Lead and selenium were qualified due to low LCS % recovery. TPH was qualified due to high MS/MSD % recovery. Cyanide was qualified due to high LCS % recovery.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/07/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 12/12/01

A Tier II data validation was performed on data for five soil samples collected on December 12, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-059 through WT-CS-02-063. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E112489 (batch 12036).

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 13.7°C, which was not within the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature due to the logistics of the sample transport process. Samples were collected at ambient temperature, placed in a cooler on ice and immediately transferred to the courier. The trip from the Site to the laboratory is generally completed in approximately one hour.

Agreement with the Chain of Custody

Six samples were shipped to Premier Laboratory under chain of custody on 12/12/01. The samples were analyzed for PCBs by SW846 Method 8082. Samples were also submitted for “other” constituents. Validation of PCBs is discussed in this report. The validation of the “other” constituents is discussed under separate cover. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be

an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001494 with this data set. Percent recovery and relative percent difference were within acceptance limits. All data were accepted as reported in the unspiked sample.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

No field duplicates were submitted with this data set.

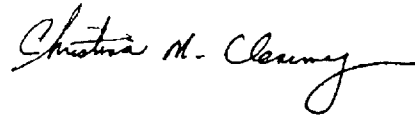
OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should

use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is written in a cursive style with a long, sweeping horizontal line extending from the end of the name.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
Sample Date: 12/12/01
DV Date: 01/15/02

Project Name: Willow Brook Pond PCB Remediation
DV Report for Other Parameters

A Tier II data validation was performed on data for five soil samples collected on December 12, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples discussed in this validation memorandum were analyzed for VOCs by SW846 Method 8260B, SVOCs by SW846 Method 8270C, TPH by USEPA 418.1, Metals by SW846 Method 6010B and Cyanide by SW846 Method 9012. These parameters are herein referred to as the "other parameters." Validation for the samples submitted for PCBs by SW846 Method 8082 are presented in a separate validation report.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E112489.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for

validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG), Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |

- Blanks
- Tentatively Identified compounds

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Five soil samples were relinquished to Premier Laboratory, LLC under chain-of-custody on December 12, 2002. The laboratory received the samples on January 4, 2002. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted.

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 13.7°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

The following tables summarize VOC compounds that were outside QC acceptance criteria for the initial and continuing calibrations:

Initial Calibration for VOCs

All VOC target compounds were within acceptance limits.

Continuing Calibration for VOCs

The following table summarizes VOC target compounds that did not meet acceptance criteria:

Compound	RRF or linear regression	%D	Positive detects	NDs	Affected samples
Chloroethane		38.2	J	J	All

All affected results were qualified accordingly.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

The method blank was evaluated for contamination for VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All internal standard area counts and retention times were within acceptance limits.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001494 (Batch 12035). The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
Chloroethane	56	54	50-147		J	J	Low	2001494

There were no detects reported in the unspiked sample. All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

The laboratory control samples were within acceptance limits.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 13.7°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice during transport. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for

each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by

assessing internal standard area count recovery and retention time drift.

All internal standard area counts and retention times were within acceptance limits.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001494. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	RPD limits	Positive detects	NDs	Bias	Affected Samples
Benzo(a)anthracene	15		23-166	80	72	J	J	Low	2001494
Benzo(b)fluoranthene	19		28-176			J	J	Low	2001494
Benzo(k)fluoroanthene	24		28-172			J	J	Low	2001494
Chrysene	16		22-169			J	J	Low	2001494
Fluoranthene	15		16-192	575	24	J	J	Low	2001494
2-Nitroaniline	0	0	25-100			J	R	Low	2001494
3-Nitroaniline	0	0	17-98			J	R	Low	2001494
Phenanthrene	4.8		15-174	174	80	J	J	Low	2001494

Pyrene	5.5		20-160	286	70	J	J	Low	2001494
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All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

The laboratory control samples were within acceptance limits.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Data
- Agreement with Chain of Custody
- Preservation and Technical Holding Times
- Calibration Verification
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Furnace AA / Post Digestion Spike
- Laboratory Control Sample

- Blanks
- ICP Interference Check Sample
- Serial Dilution Results
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001494. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and

laboratory precision).

A field duplicate pair was not submitted with this data set.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

The following table summarizes data that did not meet acceptance criteria (80-120%) for percent recovery (%R) criteria:

Analyte	%R	%R Range	Detects	Non-detects	Samples affected
Barium	124.0	80-120	J	A	All Mass metal samples
Selenium	65.7	80-120	J	UJ	All Mass metal samples
Arsenic	135.4	80-120	J	A	All SPLP metal samples
Nickel	79.9	80-120	J	UJ	All SPLP metal samples
Lead	127.4	80-120	J	UJ	All SPLP metal samples

All data were qualified accordingly.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they

were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain of Custody
- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibration was analyzed at the appropriate frequency. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable.

Matrix Spike

A MS / MSD was performed on sample 2001494 and was within QC acceptance limits for %R and RPD for TPH.

Field Duplicate

A few duplicate pair was not submitted with this data set. Field duplicates were submitted at a frequency of one per twenty samples and are tracked on an on-going basis.

Laboratory Control Sample

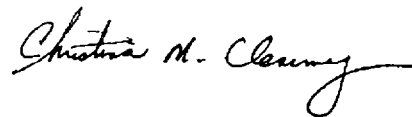
All QC acceptance criteria were met for LCS for TPH.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was qualified as estimated based on low percent recovery for the MS / MSD analyses, and due to high %D in the continuing calibration. Some SVOC compounds were qualified as estimated or rejected based on low percent recovery and high RPD for the MS/MSD analyses. Barium and Selenium results were qualified as estimated based on low/high percent recovery for the LCS sample for mass metals. Arsenic, Nickel and Lead were qualified as estimated based on low/high percent recovery for the LCS sample for SPLP metals. A description of the qualified sample results are outlined in Tables 3 and 4 specific to each parameter and are attached to this validation report.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Paragraph 16 of the Partial Consent Decree Relating to Multiple Parties, Performance of Remedial Work and Cost Recovery have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 12/07/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 12/05/01

A Tier II data validation was performed on data for five soil samples collected on December 04, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-03-044 through WT-CS-03-048. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E112079 (batch 11789).

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample (2001440) was submitted with this data set. The PE sample was prepared by Environmental Resource Associates (ERA). The ERA lot number associated with this sample was 1129-01-02.2. Aroclor 1254 was spiked into the sample at a concentration of 7.73 ug/l. The performance acceptance limit was 3.96-10.2 ug/l. The laboratory reported a concentration of 6.0 ug/l. QC acceptance criteria were met. Performance data is presented in Attachment 1 of this report.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 11°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature due to the logistics of the sample transport process. Samples were collected at ambient temperature, placed in a cooler on ice and immediately transferred to the courier. The trip from the Site to the laboratory is generally completed in approximately one hour. Since the process from sample collection to receipt at the laboratory happens over a short time period, the ambient temperature samples do not have sufficient time to reach 4°C. This issue does not impact data usability.

Agreement with the Chain of Custody

Seven samples were shipped to Premier Laboratory under chain of custody on 12/04/01. The samples were analyzed for PCBs by SW846 Method 8082. Samples were also submitted for “other” constituents. Validation of PCBs is discussed in this report. The validation of the “other” constituents is discussed under separate cover. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of

contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001435 with this data set. Percent recovery and relative percent difference were within acceptance limits for the MS. A high % recovery was reported for the MSD. Since the LCS was within acceptance limits and no detects were reported in the unspiked sample, this issue did not impact data usability. All data were accepted as reported in the unspiked sample.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

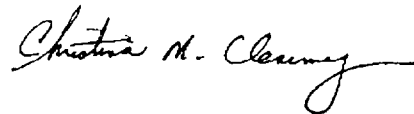
No field duplicates were submitted with this data set.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke at the end.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/30/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 12/04/01

A Tier II data validation was performed on data for three soil samples and a trip blank (2001439) collected on December 4, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. Additional samples were submitted with this SDG for PCB analysis. Validation of the PCB data was performed and submitted as a separate validation report. This validation report consists of data for VOCs (8260B), SVOCs (8270C), TPH (418.1), Metals (6010B) and Cyanide (9012), herein referred to as "other" parameters.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E112079.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Where there was a lack of guidance for other parameters, the same logic as presented in Region 1, EPA validation guidelines for similar parameters / methodologies were used where applicable. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG), Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |

- Blanks
- Tentatively Identified compounds

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on December 4, 2001. The laboratory received the samples on December 4, 2001. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted.

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 11.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations. Bromomethane was outside the acceptance limits for % drift for the continuing calibration. All affected sample data were qualified as estimated (J).

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2001439) and all method blanks were evaluated for contamination for VOCs. No detects were reported in the blanks.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001435. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
Chloroethane	48	50	60-142		J	J	Low	2001435

The non-detect result for chloroethane in the unspiked sample was qualified as an estimated result.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery for the VOC laboratory control sample.

Field Duplicate

A field duplicate was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and

direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 11.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice during transport. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All target compounds were within acceptance limits for SVOC compounds for the

initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All SVOC QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001435. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	% Rec MS	%Rec MSD	QC limits	% RPD	RPD limits	Positive detects	NDs	Bias	Affected Samples
Benzo(b)fluoranthene				70	69	J	J	None	2001435
Benzo(g,h,i)perylene				41.8	38	J	J	None	2001435
Dibenz(a,h)anthracene				35.0	32	J	J	None	2001435
Di-n-butyl phthalate				26.9	21	J	J	None	2001435
2,4-dinitrophenol				60	47	J	J	None	2001435
Fluoranthene				86.5	24	J	J	None	2001435
Hexachlorocyclopentadiene				57.8	41	J	J	None	2001435
2-Methyl-4,6-dinitrophenol				72.3	52	J	J	None	2001435

The results in the unspiked sample were qualified as an estimated result.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria for percent recovery for the SVOC laboratory control

sample.

Field Duplicate

A few duplicate pair was not submitted with this data set. Field duplicates were submitted at a frequency of one per twenty samples and are tracked on an on-going basis.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

Inorganic data review includes a review of data for RCRA 8 metals plus copper, nickel, zinc and cyanide.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--|-------------------------------------|
| ▪ Performance Evaluation Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Technical Holding Times | ▪ Laboratory Duplicates |
| | ▪ Furnace AA / Post Digestion Spike |
| ▪ Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Blanks | ▪ Serial Dilution Results |
| ▪ ICP Interference Check Sample | ▪ Detection Limit Results |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified

blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001435. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	% RPD	RPD limits	Positive detects	NDs	Bias	Affected Samples
Chromium	154.4%	153.4%	75-125			J	A	High	2001435
Lead	173.8%	169.6%	75-125			J	A	High	2001435

All affected data were qualified accordingly.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than

35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate was not submitted with this data set. Field duplicates are submitted at a frequency of one per twenty samples and are tracked on an on-going basis.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

The following table summarizes data that did not meet acceptance criteria (80-120%) for percent recovery (%R) criteria:

Analyte	%R	%R Range	Detects	Non-detects	Samples affected
Cadmium	18.6	80-120	J	UJ	All
Selenium	75.4	80-120	J	UJ	All

All data were qualified accordingly.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are

evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain of Custody
- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A performance evaluation sample was not submitted with this data set. PEs are submitted at a frequency of one per 20 samples and are tracked on an on-going basis.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibration was analyzed at the appropriate frequency. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable.

Matrix Spike

A MS / MSD was performed on sample 2001435 and was within QC acceptance limits for %R and RPD for TPH.

Field Duplicate

A few duplicate pair was not submitted with this data set. Field duplicates were submitted at a frequency of one per twenty samples and are tracked on an on-going basis.

Laboratory Control Sample

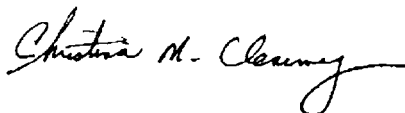
All QC acceptance criteria were met for LCS for TPH.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was qualified as estimated based on low percent recovery for the MS and MSD analyses. Bromomethane was qualified as estimated due to high continuing calibration drift. Some SVOC compounds were qualified as estimated based on high %RPD in the MS / MSD analyses. Some metal results were qualified as estimated based on low percent recovery for the LCS sample. Some metal results were qualified as estimated based on high percent recovery for the MS / MSD analyses. A description of the qualified sample results are outlined in Tables 3 and 4 specific to each parameter and are attached to this validation report.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
Sample Date: 11/30/01
DV Date: 01/28/02

Project Name: Willow Brook Pond PCB Remediation
DV Report for Other Parameters

A Tier II data validation was performed on data for one soil samples collected on November 30, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The sample discussed in this validation memorandum was analyzed for SVOCs by SW846 Method 8270C and Metals by SW846 Method 6010B. These parameters are herein referred to as the "other parameters."

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E111C58 and E112485 (SPLP metals only).

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for validating general chemistry analyses. Technical judgement was applied when

applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG), Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |
| ▪ Blanks | ▪ Tentatively Identified compounds |

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

One soil sample was relinquished to Premier Laboratory, LLC under chain-of-custody on November 30, 2001. The laboratory received the samples on November 30, 2001.” During validation, the chain-of-custody form was reviewed for accuracy and completeness. The analysis requested was labeled, but not checked off. After investigation, the correct parties were notified, and the problem was corrected. The sample was analyzed correctly.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 12.0°C. The QC

acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice during transport. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

The following table summarizes SVOC QC acceptance criteria that were not met for internal standard (IS) area counts and retention times:

Sample Number	Internal Standards	Area Counts	Ret. Time	Area counts QC Range	Ret.Time QC Range	Detect	Non-detect
2001401	Perylene-d12	362562	24.29	471225-1884900	23.84-24.84	J	UJ
2001401MS	Perylene-d12	242856	24.29	471225-1884900	23.84-24.84	J	UJ
2001401MSD	Perylene-d12	199029	24.29	471225-1884900	23.84-24.84	J	UJ

All samples were qualified accordingly.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001401. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	% RPD	RPD limit	Positive detects	NDs	Bias	Affected Samples
Di-n-octyl phthalate	330	374	8-218			J	A	High	2001401
3- & 4-Methylphenols	103	107	21-89			J	A	High	2001401
Fluoranthene				29.6	24	J	J	High	2001401

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

The laboratory control samples were within acceptance limits.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Data
- Agreement with Chain of Custody
- Preservation and Technical Holding Times
- Calibration Verification
- Blanks
- ICP Interference Check Sample
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Serial Dilution Results
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of

producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001401. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate pair was not submitted with this data set.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All mass metal data met the QC acceptance criteria (80-120%) for percent recovery (%R) criteria. The following table summarizes SPLP metal data that did not meet acceptance criteria for percent recovery (%R) criteria:

Analyte	%R	%R Range	Detects	Non-detects	Samples affected
Arsenic	135.4	80-120	J	A	All SPLP samples in data set.
Nickel	79.9	80-120	J	UJ	All SPLP samples in data set.
Lead	127.4	80-120	J	A	All SPLP samples in data set.
Mercury	124.4	80-120	J	A	All SPLP samples in data set.

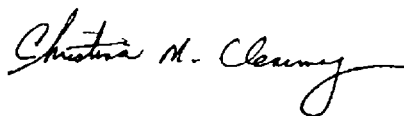
All data were qualified accordingly.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Fluoranthene was qualified as estimated based on high RPD for the MSD analysis. SVOC internal standard Perylene-d12 associated compounds were qualified as estimated based on low area counts. Nickel (SPLP) was estimated due to low LSC % recovery. A description of the qualified sample results are outlined in Tables 3 and 4 specific to each parameter and are attached to this validation report.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Paragraph 16 of the Partial Consent Decree Relating to Multiple Parties, Performance of Remedial Work and Cost Recovery have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 12/04/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/29/01

A Tier II data validation was performed on data for twelve soil samples collected on November 29, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-049 through WT-CS-02-058. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot numbers associated with this sample delivery group is E111C63 and E111C70.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample (2001402) was submitted with the E111C70 data set. The PE samples were prepared by Environmental Resource Associates (ERA). The ERA lot numbers associated with this sample was 1128-01-03.3. Aroclor 1254 was spiked into the sample at a concentration of 9.67 ug/l. The vendor certified acceptance limit was 4.95-12.8 ug/l. The laboratory reported 6.1 ug/l, which met the acceptance criteria.

A double blind aqueous performance evaluation sample (2001403) was submitted with the E111C63 data set. The PE sample was prepared by Environmental Resource Associates (ERA). The ERA lot numbers associated with the samples were 1128-01-03.2 Aroclor 1254 was spiked into the sample at a concentration of 5.09 ug/l. The vendor certified acceptance limit was 2.61

– 6.72 ug/l. the laboratory reported 4.0 u/l, which was within acceptance criteria. Performance data is presented in Attachment 1 of this report.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 12°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature due to the logistics of the sample collection / transport process. Generally the samples are collected, immediately transferred to a courier and delivered to the laboratory within one hour of pickup. This issue does not impact data usability.

Agreement with the Chain of Custody

Twelve samples were shipped to Premier Laboratory under chain of custody on 11/30/01. The samples were analyzed for PCBs by SW846 Method 8082. Samples were also submitted for “other” constituents. Validation of PCBs is discussed in this report. Validation of the “other” constituents is discussed under separate cover. No discrepancies were noted. All samples were analyzed for as requested.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001387 for lot E111C63. All spiking compounds were diluted out, as the initial concentration in the unspiked sample was 3600 ug/kg. Percent recovery and relative percent difference could not be evaluated. There was no matrix spike / matrix spike duplicate for sample 2001386 for lot E111C70. The sample was not spiked but it was analyzed. The

samples were compared as a triplicate. The samples contained Aroclor 1254 at the following concentrations: 650 ug/kg, 580 ug/kg and 650 ug/kg (RPD 11%). The samples met QC acceptance criteria for duplicate precision RPD<50%).

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

Samples 2001388 / 2001389 and 2001392 / 2001393 were submitted as field duplicate pairs. The RPD for the duplicate pair 2001388 / 2001389 was 47% for Aroclor 1254. The RPD for the duplicate pair 2001392 / 2001393 was not calculated since one result was non-detect (Aroclor 1242 ND<42 ug/kg) and the other result was greater than two times the reporting limit (Aroclor 1242: 380 ug/kg). Results for Aroclor 1242 were estimated in both samples due to poor field duplicate precision.

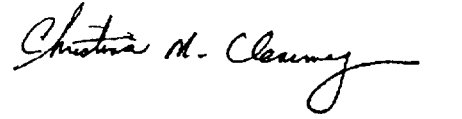
OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Aroclor 1242 results for samples 2001392 and 2001393 were estimated based on poor field duplicate precision.

To the best of my knowledge, after thorough review of the attached sampling data and

validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke at the end.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/28/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/29/01

A Tier II data validation was performed on data for six soil samples collected on November 29, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E111C63.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG),

Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |
| ▪ Blanks | ▪ Tentatively Identified compounds |

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on November 29, 2001. The laboratory received the samples on November 29, 2001. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted..

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

Seventeen VOCs were spiked into the sample. All the PE data were within vendor-certified acceptance limits.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 12.0°C. The QC

acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2001398) and all method blanks were evaluated for contamination for

VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001387. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
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Chloroethane	45	44	60-142		J	J	Low	2001387
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All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

Samples 2001392 / 2001393 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

Forty-one SVOCs were spiked into the sample. All the PE data were within vendor-

certified acceptance limits.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 12.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

The following table summarizes SVOC QC acceptance criteria that were not met for internal standard (IS) area counts and retention times:

Sample Number	Internal Standards	Area Counts	Ret. Time	Area counts QC Range	Ret.Time QC Range	Detect	Non-detect
2001387	Perylene-d12	281650	22.39	364664-145568	21.90-22.90	J	UJ
2001387MS	Perylene-d12	188070	22.39	364664-145568	21.90-22.90	J	UJ

2001387MSD	Perylene-d12	199257	22.38	364664-145568	21.90-22.90	J	UJ
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.Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001387. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	% RPD	RPD limits	Positive detects	NDs	Bias	Affected Samples
Fluoranthene				106	24	J	J		2001387
Hexachlorocyclopentadiene				42.8	41	J	J		2001387
2-Methyl-4,6-dinitrophenol		0	5-109	200	52	J	R	Low	2001387

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control sample(s).

Field Duplicate

Samples 2001392 / 2001393 were submitted as a field duplicate pair. The following table summarizes duplicate precision data:

Compound	Sample # 2001392 (ug/kg)	Duplicate # 2001393 (ug/kg)	RPD	Action	Affected Samples
Anthracene	ND	190	NC	A	2001377, 2001378
Benzo(a)anthracene	ND	380	NC	J	2001377, 2001378
Benzo(a)pyrene	ND	290	NC	A	2001377, 2001378
Benzo(b)fluoranthene	ND	230	NC	A	2001377, 2001378
Benzo(k)fluoranthene	ND	290	NC	A	2001377, 2001378
Chrysene	ND	350	NC	A	2001377, 2001378
Fluoranthene	310	820	90%	J	2001377, 2001378
Phenanthrene	190	660	111%	J	2001377, 2001378
Pyrene	250	660	90%	J	2001377, 2001378

Acceptable duplicate precision for non-aqueous samples is <50% RPD for results greater than two times the detection limit. The RPD was not calculated (NC) for Benzo(a)anthracene; however, the data were qualified since one result was less than the detection limit and the other result was greater than two times the detection limit. All affected data were qualified accordingly.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Data
- Agreement with Chain of Custody
- Preservation and Technical Holding Times
- Calibration Verification
- Blanks
- ICP Interference Check Sample
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Furnace AA / Post Digestion Spike
- Laboratory Control Sample
- Serial Dilution Results
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

Eleven metals were spiked into the sample. All the PE data were within vendor-certified acceptance limits.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001387. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses. Chromium, Copper, Nickel, and Lead were estimated due to high MS

MSD %R (225.4%, 153.2%, 141.5%, and 283.0%, respectively), outside the acceptance limits (75-125%). All affected data were qualified accordingly.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

Samples 2001392 and 2001393 were submitted as a field duplicate pair. The following table summarizes duplicate precision data:

Compound	Sample # 2001392 (mg/kg)	Duplicate # 2001393 (mg/kg)	RPD	Action	Affected Samples
Arsenic	1.6	1.7	6%	A	2001392, 2001393
Barium	28	26	7%	A	2001392, 2001393
Cadmium	.21	.59	95%	J	2001392, 2001393
Chromium	7.6	8.4	10%	A	2001392, 2001393
Copper	4.9	5.8	17%	A	2001392, 2001393
Lead	26	34	27%	A	2001392, 2001393

Nickel	6.6	7.0	6%	A	2001392, 2001393
Zinc	22	25	13%	A	2001392, 2001393
Mercury	.045	.048	6%	A	2001392, 2001393

Acceptable duplicate precision for non-aqueous samples is <50% RPD for results greater than two times the detection limit. All affected data were qualified accordingly.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data met the QC acceptance criteria for percent recovery (%R) criteria.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Matrix Spike
- Agreement with Chain of Custody
- Field Duplicates

- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

The following table summarizes performance data that did not meet vendor certified acceptance criteria:

Compound	Reported Concentration (mg/L)	Certified value (ug/L)	Acceptance Limits (ug/L)	Positive Detects	NDs	Bias	Affected Samples
TPH	50.0	37.9	22.7-39.5	J	J	High	All samples in data set

All data were qualified accordingly.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

— The initial calibration was analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve was greater than 0.9950. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was within QC acceptance limits for TPH.

Field Duplicate

Samples 2001392 and 2001393 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

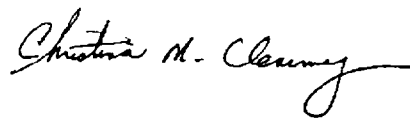
— All QC acceptance criteria were met for LCS for TPH.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was estimated due to low MS/MSD % recovery. Fluoranthene and Hexacyclopentadiene were estimated due to high %RPD on the MS/MSD analysis. 2-Methyl-4, 6-dinitrophenol was rejected due to low MSD % recovery. Some SVOC data was estimated due to high RPD in the field duplicate analysis. SVOC internal standard perylene-d12 compounds for sample 2001387 were estimated due to low area count. Chromium, copper, nickel, and lead were estimated due to high MSD % recovery. Cadmium was estimated due to high RPD in the field duplicate analysis. TPH was estimated due to unacceptable performance evaluation data.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Remedial Action Work Plan.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/30/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/28/01

A Tier II data validation was performed on data for 18 soil samples collected on November 28, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-033 through WT-CS-02-048. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111B35. Samples 2001367 and 2001384 were analyzed within the analytical batch 11619.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 10.0°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature. The sample collection and transport process is completed in a very short timeframe for this project. The field sampler often completes the sampling event while the courier is waiting.

The samples are placed in the cooler at ambient temperature as they are collected and transferred to the courier. Since the trip from the site to the lab is generally completed in less than one hour, there is not sufficient time for the samples to cool to 4°C. This issue does not impact data usability.

Agreement with the Chain of Custody

Nineteen samples were shipped to Premier Laboratory under chain of custody on 11/28/01. Analyses were requested for PCBs and “other” parameters. Validation for samples analyzed for PCBs only are discussed in this validation report. Validation for “other” parameters is discussed under separate cover. The samples were analyzed for PCBs by SW846 Method 8082. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001384 with this data set. Percent recovery was not evaluated since all spike concentrations were diluted out. A matrix spike / matrix spike duplicate was also performed on sample 2001368 with this data set. All QC acceptance criteria were met.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

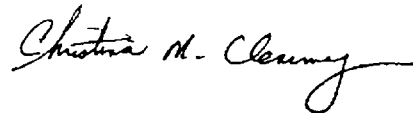
Samples 2001371 / 2001372 and 2001377 / 2001378 were submitted as field duplicate pairs. The relative percent differences (RPDs) were not calculated since the results were all non-detected.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/22/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/28/01

A Tier II data validation was performed on data for nine soil samples collected on November 28, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E111B35.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG),

Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain-of-Custody
- Preservation and Holding Time
- GC/MS Instrument Performance Check
- Initial and Continuing Calibration
- Blanks
- Surrogate Compounds
- Internal Standards
- Matrix Spike / Matrix Spike Duplicate
- Laboratory Control Sample
- Practical Quantitation Limits
- Tentatively Identified compounds

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on November 28, 2001. The laboratory received the samples on November 28, 2001. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted..

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 10.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified

based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2001385) and all method blanks were evaluated for contamination for VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001368. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
Chloroethane	46	43	60-142		J	J	Low	2001368

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

Samples 2001377 and 2001378 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 10.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All SVOC QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001368. All data for target compounds met the QC acceptance criteria.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control sample(s).

Field Duplicate

Samples 2001377 and 2001378 were submitted as a field duplicate pair. The following table summarizes duplicate precision data:

Compound	Sample # 2001377 (ug/kg)	Duplicate # 2001378 (ug/kg)	RPD	Action	Affected Samples
Ancenaphthene	ND	880	NC	J	2001377, 2001378
Ancenaphthylene	380	ND	NC	A	2001377, 2001378
Anthracene	370	1700	129%	J	2001377, 2001378
Benzo(a)anthracene	1100	2500	78%	J	2001377, 2001378
Benzo(a)pyrene	1300	2400	59%	J	2001377, 2001378
Benzo(b)fluoranthene	1500	3100	70%	J	2001377, 2001378
Benzo(g,h,i)perylene	730	920	23%	A	2001377, 2001378
Benzo(k)fluoranthene	1200	1200	0%	A	2001377, 2001378
Chrysene	1500	2700	57%	J	2001377, 2001378
Dibenz(a,h)anthracene	280	ND	NC	A	2001377, 2001378

Fluoranthene	2600	7000	92%	J	2001377, 2001378
Fluorene	250	1000	120%	J	2001377, 2001378
Indeno(1,2,3-cd)pyrene	640	860	29%	A	2001377, 2001378
Naphthalene	ND	440	NC	A	2001377, 2001378
Phenanthrene	1900	7500	119%	J	2001377, 2001378
Pyrene	3000	5800	64%	J	2001377, 2001378
Carbazole	260	990	117%	J	2001377, 2001378

Acceptable duplicate precision for non-aqueous samples is <50% RPD for results greater than two times the detection limit. The RPD was not calculated (NC) for Ancenaphthene; however, the results were qualified since was results was less than the detection limit and the other results was greater than two times the detection limit. All affected data were qualified accordingly.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Data
- Agreement with Chain of Custody
- Preservation and Technical Holding
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates

Times

- Calibration Verification
- Blanks
- ICP Interference Check Sample
- Furnace AA / Post Digestion Spike
- Laboratory Control Sample
- Serial Dilution Results
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001368. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses with the exception of zinc which was estimated due to low MS %R (74.8%) and MSD %R (73.8%), the acceptance limits were 75-125%. All affected data were qualified accordingly.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

Samples 2001377 and 2001378 were submitted as a field duplicate pair. The following table summarizes duplicate precision data:

Compound	Sample # 2001377 (mg/kg)	Duplicate # 2001378 (mg/kg)	RPD	Action	Affected Samples
Arsenic	2.5	1.7	38%	A	2001377, 2001378
Barium	30	30	0%	A	2001377, 2001378
Cadmium	.16	.24	40%	A	2001377, 2001378
Chromium	7.6	7.8	3%	A	2001377, 2001378
Copper	22	12	59%	J	2001377, 2001378
Lead	22	25	13%	A	2001377, 2001378
Nickel	8.0	8.0	0%	A	2001377, 2001378
Zinc	70	62	12%	A	2001377, 2001378
Mercury	.045	.048	6%	A	2001377, 2001378

Acceptable duplicate precision for non-aqueous samples is <50% RPD for results greater than two times the detection limit. All affected data were qualified accordingly.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data met the QC acceptance criteria for percent recovery (%R) criteria.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain of Custody
- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibration was analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve was greater than 0.9950. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was within QC acceptance limits for TPH.

Field Duplicate

Samples 2001377 and 2001378 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

All QC acceptance criteria were met for LCS for TPH.

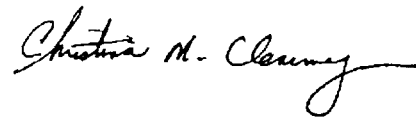
OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was estimated due to low MS/MSD % recovery. Some SVOC data was estimated due to high RPD in the field duplicate analysis. Zinc was estimated due to low MS/MSD % recovery. Copper was estimated due to high RPD in the field duplicate analysis.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Paragraph 16 of the Partial Consent Decree Relating to

Multiple Parties, Performance of Remedial Work and Cost Recovery have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is written in a cursive style with a long horizontal flourish at the end.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/30/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/28/01

A Tier II data validation was performed on data for eight soil samples collected on November 28, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-03-035 through WT-CS-03-042. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111C12. Samples 2001359 and 2001366 were analyzed within the analytical batch 11632.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample (2001400) was submitted with this data set. The PE sample was prepared by Environmental Resource Associates (ERA). The ERA lot number associated with this sample was 1128-01-03.1. Aroclor 1254 was spiked into the sample at a concentration of 2.39 ug/l. The performance acceptance limit was 1.46-2.78 ug/l. The laboratory reported a concentration of 2.4 ug/l. QC acceptance criteria were met. Performance data is presented in Attachment 1 of this report.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 9°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature due to the logistics of the sample transport process. The trip from the Site to the laboratory is generally completed in approximately one hour. This issue does not impact data usability.

Agreement with the Chain of Custody

Two samples were shipped to Premier Laboratory under chain of custody on 11/28/01. The samples were analyzed for PCBs by SW846 Method 8082. Samples were also submitted for “other” constituents. Validation of PCBs is discussed in this report. The validation of the “other” constituents is discussed under separate cover. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001360 with this data set. All spiking compounds were diluted out, as the initial concentration in the unspiked sample was 18000 ug/kg. Percent recovery and relative percent difference could not be evaluated.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

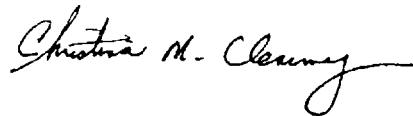
A field duplicate pair was not submitted with this data set.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke at the end.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/29/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/28/01

A Tier II data validation was performed on data for four soil samples collected on November 28, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E111C12.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG),

Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |
| ▪ Blanks | ▪ Tentatively Identified compounds |

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on November 8 2001. The laboratory received the samples on November 28, 2001. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted..

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 9.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified

based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2001398) and all method blanks were evaluated for contamination for VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001360. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
Chloroethane	45	44	60-142		J	J	Low	2001360

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 9.0°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

The following table summarizes SVOC QC acceptance criteria that were not met for internal standard (IS) area counts and retention times:

Sample Number	Internal Standards	Area Counts	Ret. Time	Area counts QC Range	Ret.Time QC Range	Detect	Non-detect
2001366	Perylene-d12	274698	22.59	347232-1388930	22.11-23.11	J	UJ
2001366-RE	Perylene-d12	203135	22.60	347232-1388930	22.11-23.11	J	UJ
2001360	Chrysene-d12	527337	19.49	528256-2113026	18.98-19.98	J	UJ
2001360	Perylene-d12	194213	22.64	347232-1388930	22.11-23.11	J	UJ

2001360MS	Chrysene-d12	465656	19.49	528256-2113026	18.98-19.98	J	UJ
2001360MS	Perylene-d12	169481	22.64	347232-1388930	22.11-23.11	J	UJ
2001360MSD	Perylene-d12	224680	22.64	347232-1388930	22.11-23.11	J	UJ

All affected data were qualified accordingly.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001360. . The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	% RPD	RPD	Positive detects	NDs	Bias	Affected Samples
Benzyl butyl phthalate	135	130	37-128			J	A	High	2001360
Benzo(g,h,i)perylene				55.5	38	J	J		2001360
2,4-Dinitrophenol	0	0	5-99			J	R	Low	2001360
Fluoranthene		12	16-192	148	24	J	R	Low	2001360
2-Methyl-4,6-dinitrophenol	0	0	5-109			J	R	Low	2001360
2-Nitroaniline	0	0	25-100			J	R	Low	2001360

3-Nitroaniline	0	103	17-98	200	40	J	R	Low	2001360
Phenanthrene				120	80	J	J	High	2001360
Pyrene	171		20-160			J	A	High	2001360

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control sample(s).

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Data
- Matrix Spike
- Agreement with Chain of Custody
- Field Duplicates

- Preservation and Technical Holding Times
- Calibration Verification
- Blanks
- ICP Interference Check Sample
- Laboratory Duplicates
- Furnace AA / Post Digestion Spike
- Laboratory Control Sample
- Serial Dilution Results
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001338. The following table summarizes MS/MSD data that did not meet acceptance criteria:

Analyte	MS %R	MSD %R	%R QC Range	Detects	Non-detects	Samples Affected
Barium	64.8	56.2	75-125	J	UJ	All samples in data set
Chromium	37.8%	17.0%	75-125	J	R	All samples in data set
Copper		73.4%	75-125	J	UJ	All samples in data set

Nickel	38.0%	24.2%	75-125	J	R	All samples in data set
Lead	35.6%	22.4%	75-125	J	R	All samples in data set

All affected data were qualified accordingly.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate pair was not submitted with this data set.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data met the QC acceptance criteria for percent recovery (%R) criteria.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data

validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain of Custody
- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibration was analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve was greater than 0.9950. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was within QC acceptance limits for TPH.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

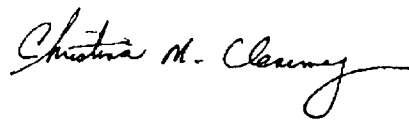
All QC acceptance criteria were met for LCS for TPH.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was estimated due to low MS/MSD % recovery. SVOC internal standard Perylene-d12 was estimated for samples 2001360 and 2001366 due to low area counts. SVOC internal standard Chrysene-d12 was estimated for sample 2001360 due to low area counts. In sample 2001360, some SVOC compounds were estimated due to high %RPD and /or low / high MS/MSD %R. In sample 2001360, some SVOC compounds were rejected due to low MS/MSD %R. Some metal compounds were estimated due to low MS/MSD %R.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Paragraph 16 of the Partial Consent Decree Relating to Multiple Parties, Performance of Remedial Work and Cost Recovery have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/30/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/28/01

A Tier II data validation was performed on data for 18 soil samples collected on November 28, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-033 through WT-CS-02-048. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111B35. Samples 2001367 and 2001384 were analyzed within the analytical batch 11619.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 10.0°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature. The sample collection and transport process is completed in a very short timeframe for this project. The field sampler often completes the sampling event while the courier is waiting.

The samples are placed in the cooler at ambient temperature as they are collected and transferred to the courier. Since the trip from the site to the lab is generally completed in less than one hour, there is not sufficient time for the samples to cool to 4°C. This issue does not impact data usability.

Agreement with the Chain of Custody

Nineteen samples were shipped to Premier Laboratory under chain of custody on 11/28/01. Analyses were requested for PCBs and “other” parameters. Validation for samples analyzed for PCBs only are discussed in this validation report. Validation for “other” parameters is discussed under separate cover. The samples were analyzed for PCBs by SW846 Method 8082. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001384 with this data set. Percent recovery was not evaluated since all spike concentrations were diluted out. A matrix spike / matrix spike duplicate was also performed on sample 2001368 with this data set. All QC acceptance criteria were met.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

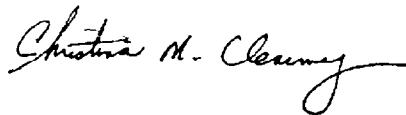
Samples 2001371 / 2001372 and 2001377 / 2001378 were submitted as field duplicate pairs. The relative percent differences (RPDs) were not calculated since the results were all non-detected.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/30/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/27/01

A Tier II data validation was performed on data for eight confirmational soil samples collected on November 27, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. A double blind performance evaluation sample (2001331) was submitted with this data set. Samples were collected from locations of the Site designated as WT-CS-03-019 through WT-CS-03-026. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111A64. Samples 2001322 through 2001329 were analyzed within the analytical batch 11587. The performance evaluation sample (2001331) was analyzed with batch 11610.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where

applicable

The following tables have been included in this report: Table 1: Tier II Data Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample (2001331) was submitted with this data set. The PE sample was prepared by Environmental Resource Associates (ERA). The ERA lot number associated with this sample was 1120-01-02.2. Aroclor 1254 was spiked into the sample at a concentration of 7.17 ug/l. The performance acceptance limit was 4.36-8.34 ug/l. The laboratory reported a concentration of 6.2 ug/l. QC acceptance criteria were met. Performance data is presented in Attachment 1 of this report.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

All soil samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 13.7°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature. The courier is often waiting for sample collection to be completed and therefore the samples are often at ambient temperature. Since the trip from the Site to the laboratory is generally completed in approximately one hour, the samples do not have sufficient time to lower to 4°C. This issue does not impact data usability.

Agreement with the Chain of Custody

Samples are included on the chain of custody for parameters other than PCBs. Only the PCB data is discussed in this validation report. The other parameters are discussed under separate cover. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001323. Aroclors 1016 and 1260 were spiked into the field sample. One peak for 1016 (PK2) in the MS was above the acceptance range for % Recovery. The laboratory control sample associated with sample was in control; all surrogates were in control in unspiked sample, the MS and the MSD. All Aroclor results in the unspiked sample were reported as non-detect. The results of the unspiked sample were accepted as reported.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

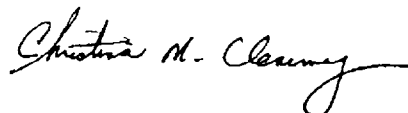
A field duplicate pair was not submitted with this data set.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in the Remedial Action Work Plan have been met.



Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/21/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/27/01

A Tier II data validation was performed on data for four soil samples collected on November 27, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E111A64.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG),

Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |
| ▪ Blanks | ▪ Tentatively Identified compounds |

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on November 27, 2001. The laboratory received the samples on November 27, 2001. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted..

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

Seventeen VOCs were spiked into the sample. All PE data were within vendor-certified acceptance limits.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 13.7°C. The QC

acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2001330) and all method blanks were evaluated for contamination for

VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

All VOC data met the QC acceptance criteria.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001323. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
Chloroethane	48	48	60-142		J	J	Low	2001323

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

Twenty-nine SVOCs were spiked into the sample. The following table summarizes the following table summarizes the PE data that were not within vendor-certified acceptance limits:

Compound	Reported Concentration (ug/L)	Certified value (ug/L)	Acceptance Limits (ug/L)	Positive Detects	NDs	Bias	Affected Samples
Benzo(a)anthracene	18	37.0	24.8-39.5	J	J	Low	All samples in data set
Benzo(b)fluoranthene	18	41:4	21.3-49.8	J	J	Low	All samples in data set
Benzo(a)pyrene	8.8	20.0	9.42-22.9	J	J	Low	All samples in data set
Chrysene	22	48.6	27.7-56.0	J	J	Low	All samples in data set
Bis(2-Ethylhexyl)phthalate	21	44.1	24.2-55.6	J	J	Low	All samples in data set
Hexachlorobenzene	33	70.0	40.6-80.5	J	J	Low	All samples in data set

All affected data were qualified accordingly.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 13.7°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding

times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be

an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All SVOC QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001323. All data met the QC acceptance criteria.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control sample(s).

Field Duplicate

A field duplicate pair was not submitted with this data set.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--|-------------------------------------|
| ▪ Performance Evaluation Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Technical Holding Times | ▪ Laboratory Duplicates |
| | ▪ Furnace AA / Post Digestion Spike |
| ▪ Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Blanks | ▪ Serial Dilution Results |
| ▪ ICP Interference Check Sample | ▪ Detection Limit Results |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

Eleven metals and cyanide were spiked into the sample. All PE data were within vendor-certified acceptance limits.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses. Mercury was estimated due to low % recovery (50.7%). All affected data were qualified accordingly.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001323. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

A field duplicate was not submitted with this data set. Field duplicates are submitted at a frequency of one per twenty samples and are tracked on an on-going basis.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data met the QC acceptance criteria for percent recovery (%R) criteria.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain of Custody
- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

The following table summarizes performance data that did not meet vendor certified acceptance criteria:

Compound	Reported Concentration (mg/L)	Certified value (ug/L)	Acceptance Limits (ug/L)	Positive Detects	NDs	Bias	Affected Samples
TPH	10.0	6.93	4.16-8.66	J	A	High	All samples in data set

All data were qualified accordingly.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibration was analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve was greater than 0.9950. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was within QC acceptance limits for TPH.

Field Duplicate

A field duplicate pair was not submitted with this data set.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

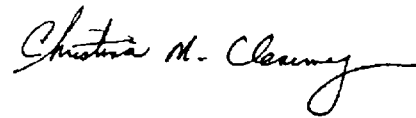
All QC acceptance criteria were met for LCS for TPH.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was estimated due to low MS/MSD % recovery. Mercury was estimated due to low LFB % recovery.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Remedial Action Work Plan.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/29/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/27/01

A Tier II data validation was performed on data for ten soil samples collected on November 27, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-03-027 through WT-CS-03-034. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111A87. Samples 2001337 and 2001445 were analyzed within the analytical batch 11619.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample (2001358) was submitted with this data set. The PE sample was prepared by Environmental Resource Associates (ERA). The ERA lot number associated with this sample was 1120-01-02.1. Aroclor 1254 was spiked into the sample at a concentration of 7.17 ug/l. The performance acceptance limit was 1.76-3.45 ug/l. The laboratory reported a concentration of 2.5 ug/l. QC acceptance criteria were met. Performance data is presented in Attachment 1 of this report.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 10.3°C, which was outside the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature due to the logistics of the sample transport process. The trip from the Site to the laboratory is generally completed in less than one hour. This issue does not impact data usability.

Agreement with the Chain of Custody

Twelve samples were shipped to Premier Laboratory under chain of custody on 11/28/01. The samples were analyzed for PCBs by SW846 Method 8082. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

Initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

A matrix spike / matrix spike duplicate was performed on sample 2001338 with this data set. All QC acceptance criteria were met.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

Samples 2001341 and 2001342 were submitted as a field duplicate pair. The relative percent difference between the results was 12%. A QC acceptance criterion is less

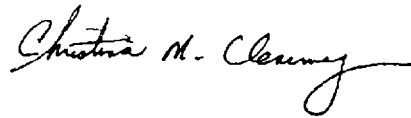
than 50% RPD for soil samples.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

No data were qualified.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 01/22/02

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/27/01

A Tier II data validation was performed on data for five soil samples collected on November 27, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT103. The internal laboratory lot number associated with this sample delivery group is E111A87.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Organic Data Review (December 1996), Pesticides / PCBs Data Review (July 1988) and Inorganic Data Review (February 1989) as appropriate. Chemistry parameters were validated using the same logic as presented in Region 1, EPA validation guidelines for other parameters where applicable. Since there is no official guidance at this time for validating general chemistry analyses. Technical judgement was applied when applicable and necessary.

The following tables have been included in this report: Table I: Summary of Tier II Data Assessment, Table II Samples associated with the sample delivery group (SDG),

Table III: Summary of Data Validation Qualifiers applied to samples as a result of the validation, and Table IV: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table II of this report.

ORGANIC DATA REVIEW

Organic data review includes review of analyses for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--------------------------------------|---|
| ▪ Performance Evaluation Sample Data | ▪ Surrogate Compounds |
| ▪ Agreement with Chain-of-Custody | ▪ Internal Standards |
| ▪ Preservation and Holding Time | ▪ Matrix Spike / Matrix Spike Duplicate |
| ▪ GC/MS Instrument Performance Check | ▪ Laboratory Control Sample |
| ▪ Initial and Continuing Calibration | ▪ Practical Quantitation Limits |
| ▪ Blanks | ▪ Tentatively Identified compounds |

DISCUSSION

Agreement of Analyses with Chain of Custody

Sample reports are checked to verify that the reported results corresponded to analytical requests as detailed on the chain-of-custody record. The chain-of-custody form is reviewed for accuracy and completeness.

Samples were relinquished to Premier Laboratory, LLC under chain-of-custody on November 27, 2001. The laboratory received the samples on November 28, 2001. During validation, the chain-of-custody form was reviewed for accuracy and completeness. No discrepancies were noted..

VOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 10.3°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified

based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods for VOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All VOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

A trip blank (2001357) and all method blanks were evaluated for contamination for VOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for VOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All VOC data for the QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a VOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001338. The following table summarizes data, which did not meet QC acceptance criteria:

Compound	%Rec MS	%Rec MSD	QC limits	RPD	Positive detects	NDs	Bias	Affected Samples
Chloroethane	48	43	60-142		J	J	Low	2001338

All affected data were qualified accordingly.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the VOC laboratory control sample(s).

Field Duplicate

Samples 2001345 and 2001356 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

SEMIVOLATILE ORGANIC ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

The sample cooler temperature recorded by the laboratory was 10.3°C. The QC acceptance limit for sample temperature is 2°C – 6°C. Samples were not qualified based on sample temperature since the time from sample collection to transport to receipt at the laboratory is very short. All samples were placed on ice and in addition, all VOC soil samples were preserved on site in methanol according to SW846 Method 5035. All samples were extracted and analyzed within method specified holding times.

GC/MS Instrument Performance Check

Gas chromatograph / mass spectrometer (GC/MS) instrument performance (tuning) checks are evaluated to ensure proper mass calibration and resolution, identification and to some degree sensitivity.

All ion abundance acceptance criteria specified in the methods SVOCs were met for each 12-hour period that samples were analyzed.

Initial and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

All SVOC target compounds were within the QC acceptance criteria for the initial and continuing calibrations.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

All method blanks were evaluated for contamination for SVOCs. No detects were reported.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

QC acceptance criteria was met for percent recovery (%R) for surrogates in all of the field samples, QC samples and blanks analyzed for SVOCs.

Internal Standards

Instrument performance, stability and laboratory precision are evaluated by assessing internal standard area count recovery and retention time drift.

All SVOC QC acceptance criteria were met for internal standard (IS) area counts and retention times.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed an SVOC matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001338. All data for target compounds met the QC acceptance criteria.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All data met the QC acceptance criteria for percent recovery for the SVOC laboratory control sample(s).

Field Duplicate

Samples 2001345 and 2001356 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Tentatively Identified Compounds

No tentatively identified compounds were reported.

INORGANIC DATA REVIEW

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- | | |
|--|-------------------------------------|
| ▪ Performance Evaluation Data | ▪ Matrix Spike |
| ▪ Agreement with Chain of Custody | ▪ Field Duplicates |
| ▪ Preservation and Technical Holding Times | ▪ Laboratory Duplicates |
| | ▪ Furnace AA / Post Digestion Spike |
| ▪ Calibration Verification | ▪ Laboratory Control Sample |
| ▪ Blanks | ▪ Serial Dilution Results |
| ▪ ICP Interference Check Sample | ▪ Detection Limit Results |

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples were properly preserved and analyzed within method-specified holding times.

Calibration Verification

Compliance requirements are evaluated to ensure that the instrument is capable of producing acceptable quantitative data.

All initial calibration verification (ICV) and continuing calibration verification (CCV) for all metals were analyzed at the appropriate frequency and were within control limits

Lab Fortified Blanks

Blank analyses were assessed to determine the existence and magnitude of contamination problems.

All analytes were within acceptance limit for percent recovery for the lab fortified blank analyses.

ICP Interference Check Sample

The ICP interference check sample is evaluated to verify the laboratory's interelement and background correction factors.

All data met the QC acceptance criteria.

Matrix Spike / Matrix Spike Duplicate

The matrix spike sample was evaluated to provide information about the effect of the sample matrix on the digestion and measurement methodology.

A MS/MSD was performed on sample 2001338. All analytes were within acceptance limits for % recovery (%R) and Relative Percent Difference (RPD) for the MS and MSD analyses with the exception of zinc which was estimated due to low MS %R (73.7%) outside the acceptance limits (75-125%). All affected data were qualified accordingly.

Laboratory Duplicates

All analytes were within acceptance limits for Relative Percent Difference for the laboratory duplicate analyses. Criteria for acceptable duplicate precision is less than 35% RPD for sample results that are greater than five times the CRDL and +/- 2X CRDL for sample results that are less than the five times the CRDL.

Field Duplicates

Field duplicates were assessed to determine overall precision (i.e. field and laboratory precision).

Samples 2001345 and 2001356 were submitted as a field duplicate pair. The following table summarizes duplicate precision data:

Compound	Sample # 2001345 (mg/kg)	Duplicate # 2001356 (mg/kg)	RPD	Action	Affected Samples
Arsenic	.93	1.1	17%	A	2001345, 2001356
Barium	46	51	10%	A	2001345, 2001356
Cadmium	.44	2.5	140%	J	2001345, 2001356
Chromium	6.8	7.3	7%	A	2001345, 2001356
Copper	6.7	8.5	24%	A	2001345, 2001356
Lead	44	72	48%	A	2001345, 2001356
Nickel	6.8	7.0	3%	A	2001345, 2001356
Zinc	50	38	27%	A	2001345, 2001356
Mercury	.17	.18	6%	A	2001345, 2001356

Acceptable duplicate precision for non-aqueous samples is <50% RPD for results greater than two times the detection limit. All affected data were qualified accordingly.

Laboratory Control Sample

The laboratory control sample is evaluated to assess the efficiency of the digestion procedure.

All data met the QC acceptance criteria for percent recovery (%R) criteria.

GENERAL CHEMISTRY DATA REVIEW

General Chemistry data review includes review of analyses for Total Petroleum Hydrocarbons (TPH). There are currently no Region 1 functional guidelines for data validation of general chemistry parameters. Therefore, general chemistry data are evaluated based upon the QC requirements specified in the method by which they were analyzed.

REVIEW OF ELEMENTS

Sample data were reviewed for the following parameters:

- Performance Evaluation Sample Data
- Agreement with Chain of Custody
- Preservation and Holding Time
- Initial Calibration Verification
- Continuing Calibration Verification
- Blanks
- Matrix Spike
- Field Duplicates
- Laboratory Duplicates
- Laboratory Control Sample
- Detection Limit Results

DISCUSSION

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias.

A PE sample was not submitted with this data set.

Preservation and Holding Times

All samples analyzed for TPH were extracted within method-specified holding times.

Initial Calibration Verification

The initial calibration was analyzed at the appropriate frequency. The correlation coefficient for the initial calibration curve was greater than 0.9950. All initial calibration QC acceptance criteria were met.

Continuing Calibration Verification

The continuing calibrations were analyzed at the appropriate frequency. The %Rs were within +/- 10% for all continuing calibration analyses. All QC acceptance criteria were met.

Blanks

No positive detects were reported in the associated method blanks. All QC acceptance criteria for the blanks were acceptable

Matrix Spike

The MS / MSD was within QC acceptance limits for TPH.

Field Duplicate

Samples 2001345 and 2001356 were submitted as a field duplicate pair. The relative percent difference was not calculated since no detects were reported in either sample.

Laboratory Duplicate

Laboratory precision was demonstrated through laboratory duplicate analysis. All sample duplicate results were within QC acceptance limits for duplicate RPD.

Laboratory Control Sample

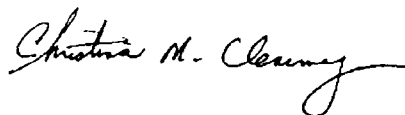
All QC acceptance criteria were met for LCS for TPH.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. The data in this data package have been qualified as rejected (R) or estimated (J) depending upon the degree of analytical and / or sampling error. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Chloroethane was estimated due to low MS/MSD % recovery. Zinc was estimated due to low MS %R. Cadmium was estimated due to high RPD in the field duplicate analysis.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified in Paragraph 16 of the Partial Consent Decree Relating to Multiple Parties, Performance of Remedial Work and Cost Recovery have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke at the end.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/15/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/13/01

A Tier II data validation was performed on data for five confirmational soil sample collected on November 13, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-02-029 through WT-CS-02-032. The samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111539. Samples 2001304 through 2001308 were analyzed within the analytical batch 11405.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data

Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

All soil samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 4.7°C, which was within the acceptance limit of 4°C +/- 2°C.

Agreement with Chain of Custody

According to the chain of custody, samples 2001304 through 2001309 were shipped to Premier laboratory on November 14, 2001. PCBs and additional parameters were requested on the chain of custody. This validation report discusses the PCB analyses only. Validation of other parameters is discussed on separate cover. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

An initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are

assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001304. Aroclors 1016 and 1260 were spiked into the field sample. All MS/MSD spikes were diluted out. The % recovery and RPD could not be evaluated. All surrogates were in control for the unspiked sample, the MS and the MSD analyses. The associated laboratory control sample was in control. The result of the unspiked sample was reported as 10000 ug/kg of Aroclor 1254. The result was accepted as reported.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

Samples 2001306 (Aroclor 1254 2400 ug/kg) and 2001307 (Aroclor 1900 ug/kg) were submitted as a field duplicate pair. The relative percent difference (RPD) for

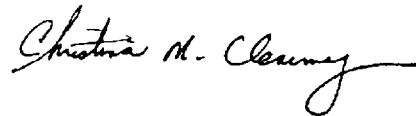
results for was 23%. QC acceptance criterion for RPD for field duplicate precision is less than 50%. The results were accepted as reported.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

All data were accepted as reported.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke at the end.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 11/12/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 11/9/01

A Tier II data validation was performed on data for twenty-four confirmational soil sample collected on November 9, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. The samples were collected from locations of the Site designated as WT-CS-03-0007 through WT-CS-03-014 and WT-CS-02-015 through WT-CS-02-028. An aqueous double blind performance evaluation sample was also submitted with this data set. The samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E111435. Samples 2001276 through 2001295 were analyzed within the analytical batch 11366, samples 2001296 through 2001299 were analyzed with analytical batch 11362 and sample 2001301 was analyzed with 11370.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines,

December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A double blind aqueous performance evaluation sample (2001301) was submitted with this data set. The PE sample was prepared by Environmental Resource Associates (ERA). The ERA lot number associated with this sample was 1102-01-05.2 (611). Aroclor 1254 was spiked into the sample at a concentration of 4.78 ug/l. The performance acceptance limit was 2.91-5.56 ug/l. The laboratory reported a concentration of 2.4 ug/l, which was below the performance acceptance limit. All non-detected results for Aroclor 1254 in all samples in the data set were rejected due to the possibility of false negatives. All detected results for Aroclor 1254 were estimated and may be biased low.

All Performance data is presented in Attachment 1. Also included in Attachment 1 is a letter from the laboratory explaining the low performance sample data. Sample specific qualification is presented in Tables 3 and 4 of this validation report.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

All soil samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 9°C, which was not within the acceptance limit of 4°C +/- 2°C. No qualification was applied based on sample temperature based on the logistics between the site and the laboratory.

Agreement with Chain of Custody

According to the chain of custody, samples 2001283 through 2001301 were shipped to Premier laboratory on November 19, 2001. PCBs and additional parameters were requested on the chain of custody. This validation report discusses the PCB analyses only. The additional parameters are discussed on separate cover. No discrepancies were noted.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

An initial calibration curve was performed on GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20% with the exception of one of the three peaks (PK2) on GC 8, which was reported as 23.1%. The average %RSD was less than 20% for this standard. QC acceptance

criteria were met for the initial calibration.

Continuing calibration verifications were performed on GC4 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001299. Aroclors 1016 and 1260 were spiked into the field sample. High % recoveries were reported for the MS and MSD analyses on

column #2. All % recoveries were within acceptance limits on column #1. A concentration of Aroclor 1254 was reported at 680 ug/g in the unspiked sample. All surrogates were in control for the unspiked sample, the MS and the MSD analyses. The associated laboratory control sample was in control. The results of the unspiked sample were accepted as reported.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS samples.

Field Duplicate

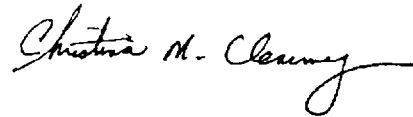
Samples 2001291 / 2001292 and 2001295 / 2001296 were submitted as field duplicate pairs. The relative percent difference (RPD) for results for samples 2001291 / 2001292 was 49%. The relative percent difference for results for samples 2001295 / 2001296 was 119%. QC acceptance criterion for RPD for field duplicate precision is less than 50%. Aroclor 1254 results for all four samples were estimated based on poor field duplicate precision.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

Data were qualified as rejected based on low performance sample recovery. Some data were qualified as estimated based on low performance sample recovery and poor field duplicate precision. The entire data set will be reanalyzed by the laboratory due to unacceptable performance sample results.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified Remedial Action Work Plan have been met.

A handwritten signature in black ink, reading "Christina M. Cleary". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Authorized Pratt & Whitney Representative



Loureiro Engineering Associates, Inc.

To: Brian Cutler / LEA
From: Tina Clemmey / LEA
DV Report Date: 10/28/01

Project Name: Willow Brook Pond PCB Remediation
Sampled Date: 10/26/01

A Tier II data validation was performed on data for twenty-one confirmational soil samples collected on October 26, 2001 for the Willow Brook Willow Pond PCB Remediation Project at Pratt & Whitney in East Hartford, Connecticut. Samples were collected from locations of the Site designated as WT-CS-02-001 through WT-CS-02-013 and WT-CS-03-01 through WT-CS-03-006. All samples were analyzed for PCBs by USEPA SW846 Method 8082.

The samples were submitted to Premier Laboratory, LLC in Brooklyn, CT. Premier processed and reported these samples under Project 88UT002-103. The internal laboratory lot number associated with this sample delivery group is E110C69. Samples 2001186 through 2001199 were analyzed within the analytical batch 11058. Samples 2001200 through 2001206 were analyzed within the analytical batch 11063.

The sample results were assessed according to Region 1, EPA Data Validation Functional Guidelines for Evaluating Environmental Analyses: Pesticides / PCBs, July 1988. Additional guidance and logic was obtained from the Functional Guidelines for Volatile / Semivolatile Data Validation Functional Guidelines, December 1996 when applicable. Technical judgement was also applied where applicable

The following tables have been included in this report: Table 1: Tier II Data Assessment, Table 2: Samples associated with the sample delivery group (SDG), Table 3: Summary of Data Validation Qualifiers applied to samples as a result of the validation, Table 4: Summary of Qualified Analytical Results.

An explanation of the validation decisions is presented below.

SAMPLES

Samples included in this review are listed in Table 2 of this report.

PCB ANALYSES

Performance Evaluation Data

Data for performance evaluation samples (PEs) are generated to provide information on the overall accuracy and bias of the analytical method and on laboratory performance. The PE is evaluated to assess the magnitude and direction of the quantitative bias. The frequency for performance evaluation samples for this project is one per twenty field samples.

A performance evaluation sample was not submitted with this data set.

Preservation and technical holding times

The validity of the analytical results is evaluated based on the preservation techniques used and the holding time of the sample, as appropriate.

All soil samples were extracted and analyzed within acceptable holding time. The sample temperature upon receipt was 17°C, which exceeds the acceptance limit of 4°C +/- 2°C. Samples were not qualified based on temperature because of the logistics of the courier process. In many cases during this project, the courier was waiting to transport samples as the field sampler was collecting the samples. The samples were

then placed into the cooler at ambient temperature. In addition, the trip from the Site to the laboratory was approximately 45 minutes, which was not enough time for the samples to be cooled to 4°C. No qualification was applied based on sample temperature.

Initial Calibration and Continuing Calibration

Compliance requirements for initial and continuing calibrations are evaluated to ensure that the instruments are capable of producing acceptable qualitative and quantitative data.

An initial calibration curves were performed on GC4 and GC8. Equal concentrations of a mixture of Aroclors 1016 and 1260 were used. Calibration factors were calculated at five concentrations. All percent relative standard deviations (%RSD) were less than 20%. QC acceptance criteria were met for the initial calibration.

Continuing calibration verifications were performed on GC8 and GC8. Each continuing calibration standard consisted of a mixture of Aroclors 1016 and 1260 and was performed at a single concentration. The percent drift (%D) was less than 15%. QC acceptance criteria were met for the continuing calibration.

Blanks

Blank analyses data is to determine the existence and magnitude of contamination problems resulting from laboratory and / or field activities and to subsequently assess their contribution to measurement error

No detects were reported in the method blank.

Surrogate Compounds

Sample matrix effects and laboratory performance on individual samples are assessed by evaluating surrogate recovery. Poor surrogate recovery can be an indication of Interfering matrix effects, presence of high concentration target and/or non-target analytes, and poor laboratory performance.

Surrogates tetrachloro-m-xylene and decachlorobiphenyl were spiked into every sample. QC acceptance criteria was met for percent recovery (%R) for both surrogates in all of the field samples, QC samples and blanks analyzed for PCBs with the exception of samples 2001204MS and 2001204MSD which had one surrogate within acceptance limits. Surrogates were diluted out for samples 2001186, 2001186MS, 2001186MSD, 2001187, 2001189, 2001190, 2001191, 2001192, 2001197, 2001202, 2001204Ms, and 2001204MSD. No qualification was applied based on surrogate recovery.

Matrix Spike / Matrix Spike Duplicate Analyses

Data for matrix spike / matrix spike duplicates were evaluated to determine laboratory precision and method bias for specific sample matrices.

The laboratory performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001186. Aroclors 1016 and 1260 were spiked into the field sample. The result of the unspiked sample was 48,000 ug/kg and was performed on a 50X dilution. The spike concentration was diluted out and therefore the %R and RPD cannot be evaluated.

The laboratory also performed a PCB matrix spike / matrix spike duplicate (MS/MSD) analyses on LEA soil sample 2001204. Aroclors 1016 and 1260 were spiked into the field sample. Ten out of 24 spike recoveries were below acceptance criteria. Three out of 12 RPDs were outside acceptance limits. It should also be noted that one surrogate was also outside acceptance limits in the MS and in the MSD. The problem appears to be isolated to the MS and MSD since both surrogates were within control limits in the unspiked sample and the laboratory control sample for the batch was in control. No qualification was applied based on the MS/MSD results.

Laboratory Control Sample

Laboratory control samples are evaluated to assess the internal quality control of the laboratory's analytical method accuracy and method bias.

All QC acceptance criteria were met for percent recovery (%R) for the LCS compounds (Aroclors 1016 and 1260) for batches 11056 and 11063.

Field Duplicate

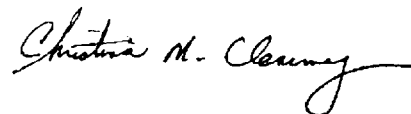
Samples 2001199 and 2001200 were submitted as a field duplicate pair with this data set. Aroclor 1254 was reported in sample 2001199 at 65 ug/kg. Aroclor 1254 was reported in sample 2001200 at 22 ug/kg. The relative percent difference (RPD) between the results was not calculated since both results were not greater than two times the reporting limit. Greater variability of results is expected at or near the reporting limit. Acceptable duplicate precision for duplicate soil samples is less than 50%. No qualification was necessary.

OVERALL EVALUATION OF THE DATA

The objective of the final evaluation of this data package is to identify the “analytical error” and any “sampling error” associated with the data. The sum of the “analytical error” and the “sampling error” equals the “measurement error.” The end user should use the “measurement error” in conjunction with sampling variability to determine “total error” (total uncertainty) associated with the data. Ultimately, the end user should assess data usability in the context of the pre-determined Data Quality Objectives (DQOs) and resultant “total error” of the data.

All QC acceptance criteria were met for this data set. No qualifiers were applied to the data.

To the best of my knowledge, after thorough review of the attached sampling data and validation information, I believe that the data does show that the Performance Standards identified Remedial Action Work Plan have been met.



Authorized Pratt & Whitney Representative